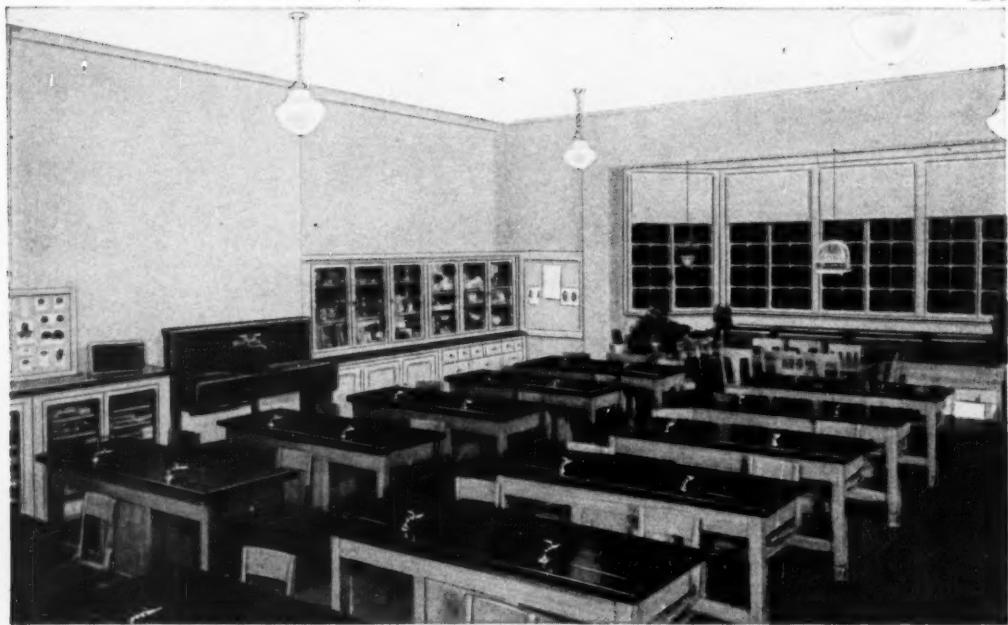


The School Executive



On to Atlantic City

FEBRUARY 1953



● A suggested color treatment for biology laboratory, according to the principles of COLOR DYNAMICS.

Presto . . . Change-o!
With Pittsburgh COLOR DYNAMICS
you give your school these wonderful benefits—

- reduced eye strain
- better academic grades
- higher teaching efficiency ratings
- fewer housekeeping problems
- less vandalism

THE magical thing about Pittsburgh COLOR DYNAMICS is the wonderful results being achieved by its use in many schools—results impossible to duplicate by ordinary methods. This revolutionary system of painting *puts color to work* almost as easily as A-B-C.

● **No longer** are schools painted merely for protection or to brighten or freshen their appearance. Today, the first consideration in painting is its effect on the efficiency and morale of student body and faculty alike.

● **With COLOR DYNAMICS** you accurately select colors which scientific tests have shown stimulate, cheer, inspire or relax. You avoid colors that fatigue, irritate or depress.

● **Through this new method** of proper color application, you choose colors for all types of school rooms in accordance with their purposes, proportions and the amount of natural and artificial light available. You create attractive, cheerful areas that lessen eye strain, stimulate concentration and help to improve the

academic grades of students and the efficiency ratings of teachers.

● **Because of the greater pride** they take in such surroundings, pupils almost instinctively keep them neater and cleaner, thus simplifying housekeeping problems. Many school authorities report that even vandalism is discouraged.

You'll find this COLOR DYNAMICS explained simply and clearly in a brand new book just prepared exclusively for the school field, in full color, of actual applications. Write today for a *free* copy.

HERE'S HOW TO GET A FREE COLOR ENGINEERING STUDY OF YOUR SCHOOL

● We will gladly show you exactly how to get the full benefits of the application of COLOR DYNAMICS by submitting a scientific color engineering study of your entire school, or any portion of it, *free and without obligation*. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have one of our trained color experts see you at your convenience. Or mail this coupon.

**SEND FOR FREE COPY OF
THIS BRAND NEW BOOK!**

Pittsburgh Plate Glass Co., Paint Div.,
Department SE-23, Pittsburgh 22, Pa.

Please send me **FREE** copy of your brand new book, **COLOR DYNAMICS** for Grade School, High School and College.

Please have your representative call for a COLOR DYNAMICS survey without obligation on our part.

Name _____

Address _____

City _____ County _____ State _____



PITTSBURGH PAINTS

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

The School Executive

FEBRUARY 1953

CONTENTS

EDITORIALS

Preview for March	5
The Work of the AASA	Walter D. Cocking 7
Keynotes—Comments on the Educational Scene	9

GREEN SHEET

Television as a Tool for School Use	Belmont Farley 19
Teachers' Salaries and the Cost of Living	Harold F. Clark 21
Your Professional Library	22

COMMUNITY-SCHOOL RELATIONS

Citizens Committee Saves a Technical High	Harry A. Little 43
Through TV, Schools are Bearding the Parent in His Den	Hazel W. Howell 45

CURRICULUM

An Art Program for the Community	John F. Rios 56
Graphic Arts—a Factor in General Education	D. E. Carlsen 46
New Device for Driver Education	J. Wayne Wrightstone, George Forlang, and Richard J. O'Connor 49
What to Do About High School Drop Outs?	E. Oren Hammond 52
Here's Proof That Core Program Students Learn Basic Skills	Arthur C. Kelley and Robert E. Beatty 54

GUIDANCE

Club Helps Students Choose a College	Morton J. Tomlinson and T. B. Southerland 50
--	--

STAFF

We Train Our Substitute Teachers	Robert W. MacVittie 58
--	------------------------

SPECIAL

This, I Believe	Walter D. Cocking 59
-----------------------	----------------------

EQUIPMENT

A New Design in Laboratory Furniture	60
--	----

SCHOOL PLANT

School Plant News and Views	63
Core Curriculum Query: Can You Put a New Program in an Old Classroom?	William G. Knife 64

PLANNING SECTION

Little Red Schoolhouse, Alabama Style	L. A. Castell 67
Making Economics Meaningful	69
Freedom is Indivisible	Ernest O. Melby 70
A Frontal Attack on Economic Illiteracy	A. L. Ayers 73
Economic Education With Focus on the Community	Paul W. Coons 76
Motivating Economic Education	Fred D. Wish, Jr. 78
Business Can Help Teach Economics	N. D. McCombs and George W. Hohl 80

SCHOOL LUNCH

Planning the School Lunchroom	Orpha Mae Thomas 113
-------------------------------------	----------------------

EDUCATIONAL NEWS

Spotlight—News of the Educational Field	84
---	----

The Washington Scene	83
----------------------------	----

REFERENCE MATERIAL

Conference Calendar	86
School Equipment News	123
Audio-Visual Aids	146
Manufacturers' Catalogs	148
New Textbooks	150

EDITOR, WALTER D. COCKING

• CONSULTING EDITOR, N. L. ENGELHARDT

EDITORIAL STAFF:

Associate Editor, L. Karen Beach • Assistant Editor, Barbara J. Michalak • Assistant Editor, Margaret E. Cutting	
Washington Correspondent, Belmont Farley • Consultant, Harold F. Clark • Book Reviews, Betty K. Johnson	
Art Director, Henry E. Salloch • Production Manager, Helen E. Weyl	
Circulation Director, John G. Stuart • Research and Service, Lillian E. Kiley	

Flexible

**ECONOMICAL TUBULAR STEEL
SCHOOL FURNITURE**



Table-Desk—Easy to Move
for Various Activities. With
All-Purpose Chair.

Tablet Arm Chair—For
Lecture Hall, Classroom.

Auditorium Chair Built for
Comfort and Service.

Movable Study-Top Chair
Unit in 7 Graded Sizes.

Movable Desk and Chair
Unit in 7 Graded Sizes.

Plastic Top Table in 36
Graded Sizes.



**ALL ON DISPLAY AT THE HEYWOOD-WAKEFIELD
EXHIBITS AT THE AMERICAN ASSOCIATION OF
SCHOOL ADMINISTRATORS CONVENTION**

Atlantic City—February 14th through 19th

BOOTHs: G-36, G-38, G-40 and G-42



School Furniture Division

MENOMINEE, MICHIGAN

GARDNER, MASS.

THE SCHOOL EXECUTIVE

EDITORIAL ADVISORY BOARD
Terms Expire December 31, 1953

W. A. EARLY
Superintendent of Schools, Savannah, Georgia
ARCHIBALD B. SHAW
Superintendent of Schools, Scarsdale, New York
E. W. MONTGOMERY
Superintendent, Phoenix Union High Schools, Ariz.
PAUL R. MORT
Professor of Education, Teachers College, Columbia University
WAYNE O. REED
Assistant Commissioner, U. S. Office of Education

Terms Expire December 31, 1954

L. D. HASKEW
Dean, College of Education, University of Texas, Austin
E. L. MOPHET
Professor of Education, University of California, Berkeley, California
EARL E. MOSIER
Dean of Instruction, Michigan State Normal College, Ypsilanti, Michigan
VIRGIL M. ROGERS
Superintendent of Schools, Battle Creek, Michigan
MAURICE F. SEAY
Director, Department of Education, University of Chicago

Terms Expire December 31, 1955

R. L. HOPPER
Professor of Education, University of Kentucky, Lexington, Kentucky
JOHN E. IVEY, JR.
Executive Director, Southern Regional Education, Atlanta, Georgia
M. S. KIES
County Superintendent of Schools, Milwaukee, Wisconsin
HARRY J. LINTON
Superintendent of Schools, Schenectady, New York
L. H. SHEPOISER
Superintendent of Schools, Mason City, Iowa

Terms Expire December 31, 1956

E. ALLEN BATEMAN
State Superintendent of Public Instruction, Salt Lake City, Utah
WALTER K. BEGGS
Professor of Education, University of Nebraska, Lincoln, Nebraska
DANIEL R. DAVIES
Professor of Education, Teachers College, Columbia University
L. G. DERTHICK
Superintendent of Schools, Chattanooga, Tennessee
EDWARD J. RUSSELL
Superintendent of Schools, Pittsfield, Massachusetts

Terms Expire December 31, 1957

HARLEY W. ANDERSON
Secretary-Treasurer, Association of School Business Officials, Kalamazoo, Michigan
W. W. CAUDILL
Research Architect, Texas A. and M. College, College Station, Texas
IRA JARRELL
Superintendent of Schools, Atlanta, Georgia
BRUCE MILLER
Superintendent of Schools, Riverside, California
PEARL WANAMAKER
State Superintendent of Public Instruction
Olympia, Washington

THE SCHOOL EXECUTIVE is published monthly at Orange, Conn., by the American School Publishing Corporation. Edgar J. Buttenheim, President; Prentice C. Ford, First Vice-President; Frank Raymond, Second Vice-President; Edwin Wagner, Treasurer. Entered as second-class matter at the Post Office at Orange, Connecticut, under the act of March 3, 1879. Subscription rates: United States—1 year, \$3.00; 2 years, \$5.00; 50¢ per copy; back or reference issues \$1.00 per copy. Foreign Countries—\$3.00 a year. Members of "Audit Bureau of Circulations" and Educational Press Association. Copyright 1953, by American School Publishing Corporation, 470 Fourth Avenue, New York 16, N. Y.

The

School Executive

Preview for March

THE March issue will feature THE SCHOOL EXECUTIVE's second annual Competition for Better School Design. The winning entries will be announced and described. *Our Schools* will deal with the important problems of selecting materials for the school library. Sarah Jones of the Georgia State Department of Education, one of the foremost authorities in the school library field, is the author.

Among the other features, I call attention to Wilson Little's article on educational leadership, Edward Richardson's discussion of professional growth and salaries, Major Bihlmeyer's first-hand account of wartime education in Korea, and Eugene Lawler's impassioned plea for old school buildings. These are but samples from a rich menu.

Sincerely,
Walter D. Cocking

EDITORIAL AND EXECUTIVE OFFICES

470 Fourth Avenue, New York 16, N. Y.
EDGAR J. BUTTENHEIM, Publisher
PRENTICE C. FORD, Vice-President and General Manager
EDWIN WAGNER, Secretary and Treasurer
FRANK H. LAAVY, Advertising Manager

BRANCH OFFICES:

Chicago 6, Illinois—Daily News Building
Frank J. Raymond, Vice-President
John A. Raymond
Los Angeles 27, California—2238 Ben Lomond Drive
Albert T. Miller, Pacific Coast Manager



Continual
maintenance...

or
no maintenance
at all?

*Which would you choose
for your windows?*

It's true—you can end window maintenance once and for all with ADLAKE Aluminum Windows! No scraping . . . no painting . . . no repairing . . . they require *absolutely no maintenance whatever* except routine washing . . . for the life of the building!

And ADLAKE construction assures a perfect weather seal for life. The exclusive combination of woven-pile weather stripping and patented seruated guides gives snug protection against wind and weather, plus lasting finger-tip control.

For both replacement in older buildings and original installation in new, ADLAKE Aluminum Windows mean extra value, extra beauty, extra efficiency. Get the whole story today—you'll find ADLAKE Representatives in most major cities.



This typical ADLAKE Window has been in service for 11 years, with no maintenance whatever!

Adlake
aluminum windows!



THE Adams & Westlake COMPANY

Established 1857 ELKHART, INDIANA New York, Chicago

The Work of the AASA

A STRONG professional organization is a most important unifying and stimulating force for any group engaged in a common task. The administrators of America's schools have such an organization in The American Association of School Administrators. Organized in 1865 with less than a hundred members, the Association today has a membership of approximately 6,000.

The Association has been most fortunate in its executive secretaries, and much of the growth and many of its contributions have been due to their intelligent and untiring efforts. S. D. Shankland, beloved by all who knew him (and who didn't), served the Association for more than 25 years. It was during this period that the organization proved itself and grew to maturity. Upon Mr. Shankland's retirement, the Association was able to attract Worth McClure as secretary. Under his able direction, further developments have and are taking place. The work of these two men exemplifies what is meant by leadership in action.

The Association has brought credit to itself also in the officers it has selected to manage and operate its affairs. The list of presidents through the years is a veritable *Who's Who* in educational administration. Current President Virgil M. Rogers, Superintendent of Schools at Battle Creek, and President-elect Lawrence Derthick, Superintendent of Schools at Chattanooga, are worthy additions to this company of great administrators and educational statesmen. In honoring these men, the Association has honored itself.

THE contributions of the Association have been many and notable. Among those which deserve special mention are the following:

The annual meetings which are recognized as the most important and influential dealing with schools. These meetings bring together the largest groups of important educators and others interested in our schools. Many of the important educational trends and policies have been born at these meetings. The significance of the annual meeting has been and is far-reaching in its influence for better schools.

The Educational Policies Commission, now in its eighteenth year, is the joint offspring of the AASA and the NEA. The series of pronouncements and studies presented by the Commission on various issues affecting schools are among the most profound and far-reaching in their effects in our history. The AASA may indeed be proud in its part in sponsoring the Commission, and in the contribution which members of the Association have made to the Commission's work.

The series of educational yearbooks sponsored and pre-

pared by the Association constitute important additions to the library of educational materials produced in America. The subjects of the yearbooks have always been chosen carefully for their current and practical importance. These books, now numbering 31, have influenced the thinking and progress of American schools to a marked degree.

Probably the most significant project ever undertaken by the AASA is the five-year study, currently in progress, on improving educational administration. This project, financed by a grant from the W. K. Kellogg Foundation, is being conducted under the general supervision of the Development Committee of the Association of which Herold C. Hunt of Chicago is chairman. The program of the study is carried on through eight regional centers and administered by eight universities which give major attention to the preparation of school administrators. The results of this project, now in its third year, will undoubtedly influence school administration for many years to come.

BECAUSE of the importance of the AASA and the contributions it has already made, a heavy responsibility rests upon it in the future. As I see it, among the many matters to which it could well give its attention, the following should receive consideration:

The nation's schools greatly need and will continue to need outstanding leadership from their administrators. The best and most promising young people must be recruited for these tasks and be given expert guidance in their preparation. The AASA should stimulate and guide the development of such a program. The very future of school administration depends upon its being done wisely and immediately.

A continuing and critical program of evaluation of the ever-changing task of the school administrator is required. A program of proper scope and character could be very useful to those in the field and also to universities preparing administrators. Experimental research is basic for this program.

The Association should intensify its efforts to identify, define and sponsor basic research in the field of administration. Here lies one of the great needs. As I see it, a dynamic program of the Association could do much to stimulate such studies.

Finally, school administrators must find more effective ways to work with those in other community agencies. The days ahead will undoubtedly witness a quickening necessity for effective cooperation. The AASA should explore, sponsor and report demonstrations conducted for the purpose.

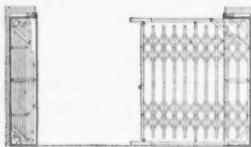
Day and Night, More Schools Rely On

Acorn folding gates



PROTECT school property and equipment from casual damage or acts of vandalism after school hours.

INSURE quick, easy control of after hours groups using gymnasium, auditorium or class rooms.



(Illustrated above) Acorn "in-a-wall" folding gate unit. Diagram shows half of unit compactly folded into wall cabinet.

SCHOOLS WORK OVERTIME TOO! More and more communities are now enjoying the facilities that schools offer for class instruction, sports events, lectures and public meetings. All after scheduled school hours! During such times, Acorn "in-a-wall" Folding Gates act as a school guardian. Quiet, impersonal, architecturally correct, they keep the evening crowds neatly channeled into the auditorium or gymnasium, and away from unused classrooms. The evening over—the gates are folded into small flush cabinets. No fuss, no bother, just complete, dignified security. Ideal for new or old school, there is a gate to meet any requirement. Full specifications available in Sweet's Architectural File, or simply write for the new Acorn catalog today.

Acorn Wire and Iron Works

5912 South Lowe Avenue, Chicago 21, Illinois

KEYNOTES

comments on the educational scene

The Right to Appoint

SCHOOL ADMINISTRATORS are greatly indebted to President William B. Nichols of the New York City Public Education Association for his clear and forthright statement to the mayor on the latter's appointment to membership on the Board of Higher Education. In his criticism of the mayor's recent action on appointments, Mr. Nichols used this definition: "The right to appoint implies only the right to act in the public good."

In some public school systems mayors appoint school board members. In all school systems superintendents name other school officers for board approval. In many school systems principals may select teachers to their staffs and may appoint students as members of important school committees. In fact, the attainment of position by appointment occurs frequently in school systems.

One may argue the system of appointment. Protest against appointment of school board members by mayors has been particularly loud and vigorous over the years. The power of appointment strengthens the incumbents in office and makes for continuity of controls. Perhaps it ought to disappear from the public school scene wherever the privilege resides in an individual.

In any case, as long as the "right to appoint" is lodged among an executive's prerogatives, Mr. Nichols' admonition may well be taken as a guide. "The right to act in the public good" becomes a basic obligation. It suggests the by-passing of nepotism, the renouncing of vengeance or personal enmity and the relinquishment of political gains. To act in the public good means to select the most competent, the best equipped and the finest among the public-spirited. The "right to appoint" will assuredly be withdrawn when and as the people recognize its abuse.

Praise for the Public Schools

THE CHILD OF FIFTY YEARS AGO, physically, mentally or emotionally handicapped, got short shrift in the public schools. Neither facilities nor teachers, understanding of his problem nor budget allotment offered the possibility of serving his special needs. Today, in many school systems a different story can be told.

Today there may be a room or even an entire building planned to meet his needs. Appreciation of his problems and recognition of his educability have expanded rapidly. Trained teachers are devoting themselves to this service where even the smallest gains bring their reward. The financing has been given as permanent a place in the budget as the education of the normal child.

All this growth redounds to the glory of our public schools. Stigmas have been wiped out, unusual opportunities for social growth have been opened up, and apparent handicaps have frequently been turned into assets.

The impetus back of this progress is, no doubt, in large part universal acceptance of the democratic belief in the sanctity of the individual and his worth to society. And

this theme has gained universal approval through repetition in the classrooms where teachers are trained, by its frequent inclusion on the printed page and in speech that travels the air waves. Thus, opportunity is now considered the right of all children.

The public schools of tomorrow may be expected to make even more substantial progress in this constructive service. There should be no complete satisfaction until every child having a special need has been given the chance to do well the things he can do and to enter adulthood trained for his constructive part in American citizenship.

Office of Education and Politics

THE UNITED STATES Office of Education is a professional agency of the Federal Government. Through the years, it has made a proud record as a non-political office. Presidents, cabinet members, the Congress have recognized it as such. The staff of the Office has always conducted itself professionally. It has not played politics; indeed, it has resisted all such pressures.

Such an attitude and such procedures are meet and right. Education is not a proper subject for political favoritism or pressures. Let's help our new national administration to continue the proud record of the past. There must be no politics in appointments to the Office of Education staff or in its work.

Role of the Cafeteria

A COMMITTEE composed of three board members and three laymen was appointed by the Board of School Commissioners of Baltimore, Maryland, and was delegated to study the problems of operation of public school cafeterias. Their recommendations submitted in the fall of 1949 were approved by the board. These approved recommendations take on special significance inasmuch as the cafeterias thereby become full-fledged members in the educational ranks of the school system. The major policies proposed follow:

That beginning January 1, 1950, the public school cafeterias be operated as an administrative division of the public school system in accord with the general policies which govern all other school functions.

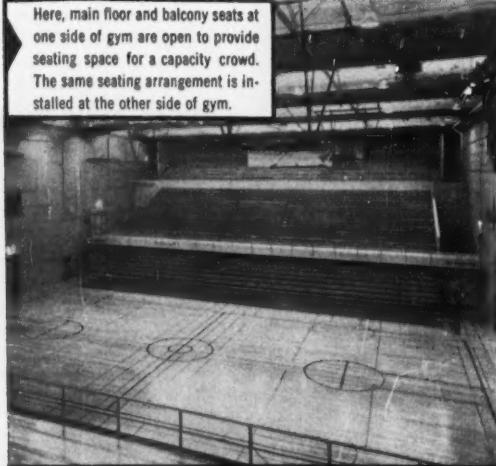
That the responsibility and authority for the cafeteria program be assigned by the superintendent to an assistant superintendent to whom the supervisory and other personnel in cafeterias will be responsible.

That the budget for school cafeterias be included annually in the Ordinance of Estimates as a self-supporting section beginning January 1, 1950.

That dietitians and supervisory personnel be employed in the same manner as other educational personnel.

That all cafeteria employees below the grade of dietitian be included in the Classified Service and treated in

Here, main floor and balcony seats at one side of gym are open to provide seating space for a capacity crowd. The same seating arrangement is installed at the other side of gym.



HOW TO SEAT MORE PEOPLE IN LESS SPACE

The two pictures at the left are only one of thousands of examples showing how tremendous savings in building costs can be achieved through the use of Medart Telescopic Gym Seats.*

In open position they provide adequate comfortable and safe seating for capacity admission-paying audiences. In closed position they "recover" virtually every square foot of floor area for normal daily use. Thus Medart Seats are the ideal solution to the problem of constructing a limited-budget gymnasium that will seat thousands of spectators but which need be only slightly larger than one with no seating at all!

Medart Seats avoid the costly wasted space required for permanent seating. A smaller building means less heating, less maintenance, less of all other expenses incidental to the upkeep of a larger structure.

It is sound business to learn how Medart Telescopic Gym Seats actually pay for themselves.

MEDART

TELESCOPIC GYM SEATS

Here seats are closed. Note that nearly every foot of space on both the balcony and main floor has been freed for normal class use.



LONG BEACH
CITY COLLEGE GYM

Architect: Jess J. Jones, Long Beach, Calif.

*Medart Telescopic Gym Seats are fully protected by U.S. Patents.



FRED MEDART PRODUCTS, INC.

3534 DE KALB STREET
ST. LOUIS 18, MISSOURI

World's Only Complete Single Source For Gymnasium Equipment
 Telescopic Gym Seats Lockers & Wire Basket Shelving Locker-Robes & Grade-Robes Basketball Backstops Physical Fitness Apparatus Basketball & Football Scoreboards Physical Therapy Equipment

Write For Catalog



full accordance with the legal provisions governing other classified employees in the employ of the Board of School Commissioners.

That all cafeteria employees be offered, as soon as possible, membership in the Employees' Retirement System of Baltimore City, with credit for service prior to the date of their entry into the system.

That agreement be sought with the city authorities to retain reserve funds in cafeteria accounts for cafeteria purposes, such as the installation of new cafeterias in existing buildings and the renovation of obsolete equipment.

The committee deserves commendation for its enlightened interpretation of the cafeteria situation. The cafeteria has definitely become an educational center. Its teachings on food and diet have immeasurable import in the educational growth of every child. Among the laboratories of a school, none takes on greater importance than the cafeteria and its auxiliary spaces where cleanliness and health needs are stressed alongside of man's eternal problems of food production, processing and distribution.

School Board Institutes

WE HAVE OBSERVED with satisfaction the increasing number of schools of education which are providing programs for school board members. Most frequently these programs are called institutes. They vary in organization and procedure; they are usually one day institutes carried on over a period of weeks. Opportunity is provided for study and discussions of common problems. Expert consultants are provided by the colleges, and other resources of the institutions such as library materials are made available. Such a service is timely and helpful. Keep up the good work.

Fifty Years Since "Kitty Hawk"

PROGRESS IN AVIATION since the memorable flight by the Wright Brothers at Kitty Hawk in 1903 can be described only with such super-adjjectives as amazing, colossal, stupendous and other P. T. Barnum words. Airplane companies are predicting millions more passengers in each successive year. Air freight and express are pyramiding beyond all dreams. Jet planes in peace and war are conveying men and their materiel at mounting super-sonic speeds. In a few years, none will preen himself on belonging only to the earthbound.

Boys and girls in today's schools have been born into the air age. Their life activities will be speeded up, their geographical horizons extended, their first-hand knowledge of world situations will be expanded and their friendships will multiply to include people of hitherto remote lands.

It seems appropriate that school systems celebrate this fiftieth anniversary by telling the story of man's struggle to conquer the air. Children may be encouraged to make historic exhibits, to write stories about aviation's pioneers, to inspect airports, to make air maps and to participate in many other significant activities.

A comprehensive program with a school event in the auditorium showing the progress from "then" to "now," with awards to the best endeavors, could do much to

point the way to tomorrow's expansion of man's achievements in the air.

San Diego's Administration Headquarters

SUPERINTENDENT WILL CRAWFORD, his associates and the people of San Diego are to be congratulated on the vision and wise planning which led to the construction of the new school headquarters center in that city. The plant cost one and a half million dollars. One is convinced after a visit to the building that the money was well spent.

The center is well planned for the tasks which are performed at the headquarters of a large school system. The interrelationships of the various offices and facilities have been thoughtfully developed. An atmosphere of work and appreciation for the importance of education is evident. The appointments are dignified and in good taste. The good people and the professional staff of San Diego are proud of their new headquarters. They have a right to be.

(Editor's note: We have arranged with Superintendent Crawford for a special presentation of this new building in an early issue of THE SCHOOL EXECUTIVE.)

The Mayor and the Board of Education

MUCH HAS BEEN WRITTEN over years past and many professional discussions have centered around the method of securing members for boards of education. The pros and cons of mayoralty appointment, popular election, designation by judges and other methods have been presented and weighed. Professional educators have widely approved selection by the people from a ballot listing which guarantees good candidates free from domination of any of the many groups that desire control. Other equally well-versed school men and women have expressed confidence in the mayoralty plan.

The mayor of one of America's large cities recently requested the resignation of all members of his city's board of education. His reason appeared to be the lack of positive action in advancing school building construction for a growing area of the city. The merit of the criticism, however, is not the question being discussed here. The intent is simply to bring to the fore the power that may reside in one man to control the policies or major activities of a public school system. The issue in this case has been brought to the attention of the people. How often, however, does a mayor dominate without the people's knowledge. The answer is many, many times and in many communities.

Many school districts are certainly content with their lay representation. Important and intensive research covering both the contented and the dissatisfied, the fifty year history of school boards in action, their successes and their failures might well be undertaken by a well-endowed foundation.

American schools deserve the most competent and definitely independent boards of education. The degree to which these objectives are being achieved and the way to assure such gains for all districts for a long future period seem important issues for research and report.

Keep an eye out



**See a completely
new line of
school furniture
by Brunswick ***

* . . . at Booth 1442, the AASA Convention, Atlantic City. The Brunswick-Balke-Collender Company will present a completely new line of school furniture of advanced design.



Photo courtesy Brush High School, Lyndhurst, Ohio

**In any language...
SOUND MIRROR® is best!**

Whatever the subject—languages, dramatics, public speaking or other studies—the ease and quality of recording are essential to the success of the program. That's why the Brush Soundmirror is tailored to school needs...

- it can be operated readily by anyone in the class.
- it's light in weight, thus easily portable.
- it has excellent tonal fidelity to permit faithful reproduction.
- Most important of all, it has *demonstrated* its value in thousands of schoolroom applications. The experience gained from this wide use is designed into today's Soundmirrors.

Write now for further information on the Soundmirror. Brush Electronics Company, Dept. S-2, 3405 Perkins Avenue, Cleveland 14, Ohio.

BRUSH ELECTRONICS

INDUSTRIAL AND RESEARCH INSTRUMENTS
PIEZOELECTRIC MATERIALS • ACOUSTIC DEVICES
ULTRASONIC EQUIPMENT • TAPE RECORDERS
RECORDING EQUIPMENT



COMPANY

formerly
The Brush Development Co.
Brush Electronics Company
is an operating unit of
Clevite Corporation.

5

The five winners in THE SCHOOL EXECUTIVE's Second Annual Competition for Better School Design . . .

plus the additional designs receiving honorable mention, will be featured in a 24-page section of the March issue of THE SCHOOL EXECUTIVE.

The five winners, selected from over 100 competition entries by a panel of five architects and school plant specialists, will be announced at the meeting of the American Association of School Administrators in Atlantic City, February 14. These winners represent the outstanding architectural designs in the school building field during 1952.

The March coverage will include biographical sketches of the architects and photographs, sketches, descriptions, and the judges' critical evaluation of the winning school building designs.

That's in March. Another *must* for all school executives!

NOW... • Wascolite Skydomes framed in Extruded ALUMINUM

THE PIONEER PRE-FABRICATED ACRYLIC SKYDOME . . . NOW RESEARCH-IMPROVED FOR GREATER STRENGTH, GREATER BEAUTY, GREATER PERMANENCE, GREATER ECONOMY

FIRST with "the dome that floats in its frame" . . .

FIRST with the protected edge . . .

FIRST with Daylight Engineering Service . . .

NOW FIRST AGAIN with frames of extruded aluminum . . .
for a great advance in performance . . .

AT NO ADVANCE IN PRICE!

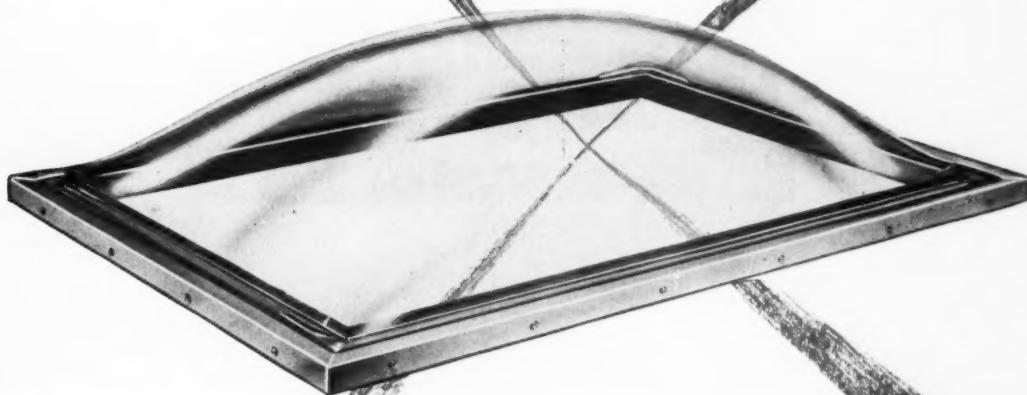
Extruded aluminum shapes .078" thick—4 times as thick as sheet stock. Mitred welded joints. When Wascolite Skydomes go in, maintenance costs go out. Prefabricated Wascolite Skydomes come in 3 basic shapes, 17 sizes, with clear or translucent acrylic domes. Weatherproof, shatter-resistant, they provide a flexible, economical, efficient daylighting system.

AND THE PRICELESS WASCOLITE EXTRA

We will prepare a scientific Daylighting Study on your next job without cost or obligation. Send us blueprints and lighting requirements; we will send you specs. and drawings showing size, type, number and spacing of Skydomes for correct balanced illumination.

Write for new A.I.A. Folder

WASCO FLASHING COMPANY
84 Fawcett St., Cambridge 38, Mass.



WASCOLITE



SKYDOMES

U.S. PAT. 2610593

Other patents pending

WE LOST A \$21,000 ORDER.

The bronze plaque shown here was presented to the Rayen School authorities to mark the historic decision reached by the Ohio Board of Building Standards in making it legal to install UNIVENTS in Ohio Schools.



1921—the installation of the now famous UNIVENT in the Rayen High School, pictured above . . . marked a new era in practical and healthful heating and ventilating in America's schools. The design of the UNIVENT provided "classroom climate" far superior to anything then available. Even today . . . these same units were found to be in perfect working order. The illustration on the left—shows one of the original UNIVENTS installed in 1921—and still working perfectly.

...and liked it!

This is a story . . . and a true one . . . of how Herman Nelson lost an order and liked it. This little story will also illustrate very clearly how advanced and how much better HERMAN NELSON equipment is . . . and always has been!

'Way back in 1921 Herman Nelson engineers installed sixty unit ventilators — then called "Univents" — in the Rayen High School at Youngstown, Ohio. Those early "Univents" were engineered to rigid standards designed to solve the ventilating problems of a new school *modern to that era*. They were the best ventilators on the market—years ahead in design!

Thirty years later the Youngstown school authorities, as part of a modernization program, were ready to replace these pioneer "Univents" with new Herman Nelson DRAFT|STOP units.

At this point Mr. S. R. Kreps—who had watched these Herman Nelson "Univents" give trouble-free performance all these years—decided to investigate. Mr. Kreps is Super-

intendent of Buildings and Construction, a veteran of 40 years in Youngstown schools.

His investigation and subsequent report found: The *original*, 30 year old "Univents" were still performing their daily task of heating and ventilating the school rooms economically and with complete satisfaction. They still met the best ventilating standards according to the needs of this older type school where window glass areas were smaller and draft problems not serious.

Here was the finest testimonial to the farsighted leadership of Herman Nelson equipment possible. It backed up what we have always claimed—that Herman Nelson equipment is years ahead in design. We were pleased with Mr. Kreps' report. We were happy to lose the order.

Of course if you are planning a new school—it will pay you to specify the successor to "Univent"—the Herman Nelson DRAFT|STOP—as far ahead today as was the "Univent" thirty years ago. DRAFT|STOP is a unit ventilator that cools as well as heats and at the same time performs this added task . . . it eliminates drafts characteristic of modern school-rooms with their large areas of glass.

If you are planning a new school or a school modernization program — it will pay you to choose Herman Nelson DRAFT|STOP—the unit ventilator designed to keep children learning—in health and comfort. Please write Dept. SE-2, Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., Louisville 8, Kentucky.

ELEMENTARY SCHOOL; EAST JACKSON, MICHIGAN. Superintendent of Schools; BERTHA L. ROBINSON. Architect; BINDA AND HAUGHEY. Consulting Engineer; T. MARVIN SAHLIN.



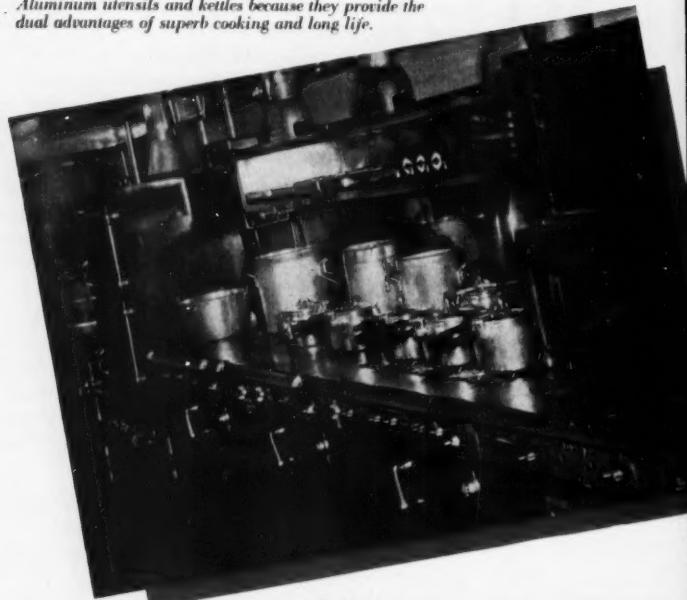
See DRAFT|STOP at the American Association of School Administrators Convention, Atlantic City, February 14-19.

BOOTHES H-46-48-50

1953—the typical modern classroom, pictured above, with its huge window areas presented new and complex heating . . . ventilating and cooling problems. Once again Herman Nelson provided the practical solution with the development of the now widely accepted DRAFT|STOP unit ventilator . . . the finest heating, ventilating and cooling system ever designed!

DRAFT STOP HERMAN NELSON
SYSTEM OF CLASSROOM
HEATING AND VENTILATING

This large Eastern Public School System uses Wear-Ever Aluminum utensils and kettles because they provide the dual advantages of superb cooking and long life.



YOU BENEFIT 2 WAYS FROM WEAR-EVER ALUMINUM

1 SUPERB COOKING—Aluminum is one of the best conductors of heat known. As a consequence, aluminum S-p-r-e-a-d-s heat fast and evenly throughout the utensil instead of leaving it concentrated at the bottom. Thus, foods prepared in Wear-Ever utensils cook uniformly. Scorching and burning are easily avoided, even when making delicate sauces.

*Read the details in our booklet,
"Facts Worth Knowing About Wear-Ever Aluminum"*

2 LONG LASTING—Wear-Ever professional utensils are made of an extra hard, wrought sheet aluminum alloy with about almost twice the strength of the one formerly used in cooking utensils. This tough alloy withstands denting and gouging. Wear-Ever utensils last longer—cut replacement costs, yet they are light in weight—easy to move about.



Items of the Month

SEE YOUR DEALER



Sauce Pots

Open bead, seamless, hard alloy.
14, 20, 26 qt. sizes
(Also in heavy-duty style)



Roasters

In many styles and sizes



Trays

Regular or Alumilite finish.
Rectangular—7 sizes; oval—5 sizes



Gas Fired Kettle

Direct heating—no steam needed.
10, 20, 30, 40 gal. sizes

The Aluminum Cooking Utensil Co.,
6602 Wear-Ever Bldg., New Kensington, Pa.

- Send me a copy of your booklet, "Facts Worth Knowing About Wear-Ever Aluminum."
- Send me your new, consolidated catalog showing the entire Wear-Ever line of professional utensils.

NAME

TITLE
Fill in, clip to your letterhead and mail today



No. 99. Published to provide basic information on education, school finance and publications to interested lay citizens. Reprints in quantities of 10 or more may be purchased from The School Executive, 470 Fourth Avenue, New York 16, N. Y.

10 copies for 1 month: \$1.00, for 12 months: \$10.00
25 copies for 1 month: 2.00, for 12 months: 20.00
50 copies for 1 month: 3.00, for 12 months: 30.00
100 copies for 1 month: 5.00, for 12 months: 50.00

Next Month:
Selecting Materials for the School Library

Television as a Tool for School Use

BELMONT FARLEY
Director of Public Relations
National Education Association

A TELEVISION transmitter will soon take its place beside the astronomical telescope on Mt. Wilson. Serviced by the University of Southern California with funds advanced by the Hancock Foundation, programs under the direction of William H. Sener are expected to serve areas as distant as San Diego. The television studios of the university are among the most elaborately equipped in the nation.

In Oklahoma, plans include television towers that may attain a height of 1,400 feet to take the University of Oklahoma from Norman to town and city on Oklahoma's plains.

New York State is well advanced in its plans for a ten-station network under the direction of the State Department of Education. A Commission appointed by the governor is studying the project. Construction funds are expected from the state legislature, and operation costs will be defrayed in part of state appropriations for adult education.

A three-station network is expected to serve Connecticut. Wisconsin will follow its chain of FM stations from the University across the Badger State with an educational network under the direction of Harold B. McCarty. Burton Pauli, director of Radio Station KUOM, is organizing a nine-station network for Minnesota connected by microwave relays. The Bay Area Educational Television Association will put Channel 9 to work for San Francisco, Oakland and their outlying suburbs.

Rutgers University at New Brunswick, New Jersey, recognizing that technicians will soon be in great demand by educational television stations, has equipped a studio with the most modern facilities and organized courses for those who are going

to telecast tomorrow's program. The courses range from script writing to the making of kinescopes.

The fast moving plans of these educational institutions, city governments and boards of education are offered for illustration only. There are many more. From coast to coast, eligible licensees will soon put to educational use a substantial percentage of the 242 television station assignments set aside for that purpose by the Federal Communications Commission out of the total of 2,000 television station possibilities.

The Federal Communications Commission has granted the educational world a period of grace that ends next June 2. After that date, station assignments set aside for education but not applied for may be allocated to commercial broadcasters.

Educators Quick to Apply for Channels

The speed with which educators are turning their attention to this new educational opportunity has exceeded the expectations of the Joint Committee on Educational Television which initiated the hearings after which, on April 14, 1952, the FCC held back nearly 12 percent of the total possible station assignments for the first refusal of educational institutions and organizations. Not all of the 242 station assignments will be taken up by education. Some of them are located where there are no educational groups able to build stations. Others are located in areas where sparse population or topographical handicaps make telecasting inadvisable. However, a substantial portion of the public domain set aside for educational use will be employed for that purpose.

On July 1, the Commission started processing

applications for commercial stations. Competition for technicians of all types is already critical. To meet this demand, 136 colleges and universities are offering courses at the undergraduate level to meet the growing requirements of the television industry. Six institutions of higher learning are enrolling graduate students in such courses. Starting this month, the University of Southern California will offer for the first time in history an academic degree of Bachelor of Science in Television. The Radio Corporation of America is providing scholarships and fellowships for students in such courses, which are being granted to applicants through the National Research Council.

Television is long past the stage of novelty. Large areas of the country are not yet serviced by television of any kind, but with only 115 stations in operation, the American people have already purchased 17 million receiving sets.

"The question," says Paul Walker, chairman of the FCC, "is not 'shall we use television?' but rather, 'how shall we use it?'"

Repeatedly from many sources television has been characterized as the greatest opportunity for the extension of culture since the invention of printing. Soon, educational institutions, organizations and school systems will be using the medium daily. Meanwhile, in Philadelphia, Chicago, Kansas City, Baltimore, Washington and other cities, commercial television stations are cooperating closely with educational agencies. An outstanding illustration is offered by WATV, Newark, a non-network station making some of the best hours of the evening available for educational programs.

In several cities, technical facilities have been offered to educational groups by commercial broadcasters. Some of them will telecast from commercial transmitting towers, thus saving substantial construction costs. One nationally known producer of television receivers has made available a fund for the preparation of personnel and the advancement of techniques to be employed in telecasting educational programs. Another manufacturer has equipped a studio for the training of those who eventually will be producing educational programs.

Broadcasters, Funds, Agencies Aid Educational TV

The Fund for Adult Education established by the Ford Foundation has to date appropriated \$235,000 for the use of the Joint Committee on Educational Television. With these funds, legal and engineering aid of a high type is being provided states and communities where individual stations or networks are planned. The Fund for Adult Education granted Station WOI at Iowa State College \$280,000 for experimentation in the preparation and production of educational television programs.

The Adult Education Fund has just announced

the creation of two important agencies—one to promote educational television, the other to render programming aid to television stations. The National Citizens Committee for Educational Television will help states and communities secure public support for the establishment and maintenance of educational television stations.

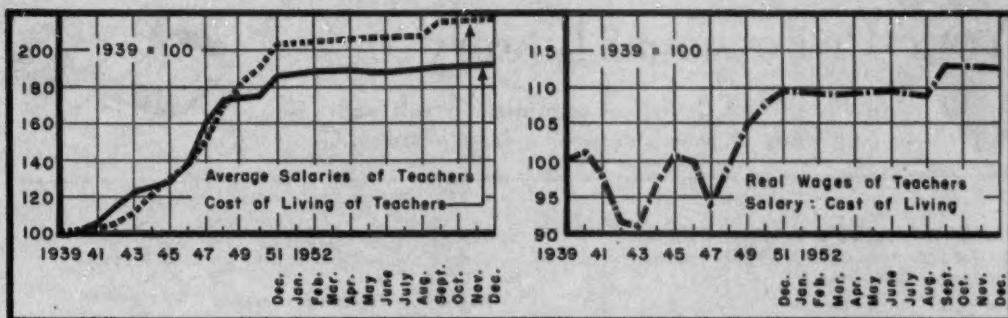
The non-profit corporation called Education Television and Radio Center will begin its work by providing tape recordings for commercial radio stations. When educational television stations begin operation it will act as an exchange and production agency for them. The Adult Education Fund initiated this service with a \$1.5 million grant. The expectation is that the Center will be supported by the stations it serves.

Experiments Prove Television Effective

Objective research, as well as judgments based upon previous experiments with audio-visual aids, indicates the great effectiveness of this new educational medium. A series of elaborate experiments conducted by the United States Navy show that students receiving instruction by television screen rated higher on their tests than those who pursued the same courses through the conventional classroom procedures. Opinions differ as to why this is so. Probably freedom from distraction partially explains the superiority of instruction by television. Habits of focusing attention upon the motion picture screen may account in part for it. At any rate, those who plan the use of television either as a principal method of instruction or as a supplementary aid to conventional programs of teaching have no reason to apologize for the medium.

The results of Navy tests are confirmed by the large television audiences viewing programs of instruction which vary from normal only by reason of the fact that they use the medium of television. Psychology lectures given by a professor at Western Reserve University draw an audience of more than 54,000. His lectures for the screen almost duplicate those for his classroom.

Television offers economies that could not otherwise be effected and opportunities otherwise unattainable. Through this medium the incredibly intricate and expensive apparatus in the world's greatest scientific institutions are available in the most remote and poorly equipped high school physics laboratory. Television itself is expensive. The average cost of constructing a station is approximately \$300,000. It may cost as much each year to operate a station, although many educational stations are operating at much less. Whatever the costs, they will certainly be reduced in the years ahead. Television, like radio, is coming into education to stay. It will expand and enrich the educational opportunities of American youth and adults as well.



Teachers' Salaries and the Cost of Living

HAROLD F. CLARK, Economic Analyst, Teachers College, Columbia University

THE index of the real wages of teachers in December was 112.7 (1939 = 100). The November index was 112.8. This represents a continued decline in the real standard of living of teachers.

The salaries of teachers continue to show small increases. This means that the changes in the real wages of teachers over short periods are determined almost entirely by changes in prices. Fortunately for teachers, prices have been showing signs of stabilizing for a good many months. If there has been any general movement in prices during this period, it has been slightly downward. Wholesale prices are slightly lower than they were a year ago. Unfortunately, the same cannot be said for the cost of living. The past twelve months have seen a rise of several percent. If wholesale prices continue to decline, this should ultimately bring about a decline in the cost of living.

The general expectation is that food prices may decline slightly. It is entirely possible that clothing prices will also show some decline. The cost of building houses is expected to be reasonably stable for the period immediately ahead. Rents, on the other hand, will almost certainly continue to rise—rents have risen less than half as much as the cost of building. Ultimately, these two figures must approach each other.

Teachers' salaries may get slightly better in the weeks and months ahead, but this is not going to be adequate to deal with the major problem. The difficulty is the relative wages of teachers.

Teachers' Wages Slower to Rise

For instance, the wages of factory workers have just reached an all-time high of something over \$70 per week. If one assumes 50 weeks of work, this would indicate an income of approximately \$3,500 a year. This is substantially above the average salary for teachers. No society dare long continue to pay its teachers less than its factory workers. The really serious matter is that

average factory wage rates per hour have gone up 170 percent since 1939, whereas teachers' salaries have gone up about 115 percent. The average income of all employees has increased 200 percent.

It may be necessary to try some very drastic procedures in order to get teachers' salaries back in line with other occupations. The various states should be encouraged to adopt a fairly high minimum and average salary for teachers. A few wealthy and favored communities should be encouraged to explore the consequences of very high salaries. It is not at all unusual for some private schools to spend \$1,000 to \$1,500 per pupil. A group of wealthy school districts should explore the possibility of spending up to \$800 or \$1,000 a pupil. One or two school systems are now spending more than \$700 per pupil. These unusually high expenditures might allow teachers salaries to go up to \$10,000 and, in exceptional cases, even higher.

High Salaries Attract Better Teachers

There are many reasons to assume that a few communities paying salaries of this type would have a great effect on the quality of the persons entering teaching. The evidence available seems to indicate that able people tend to choose occupations where there are some high salaries—the minimum or even average salaries appear to be less important than the maximum salaries. Certainly, education could profit by a substantial number of very able teachers.

The economic evidence is clear that the only way to increase the wages of everybody is to find more effective ways of working. Whether it will be possible to find more effective ways of teaching should at least be investigated. Society could undoubtedly afford to have many more teachers if necessary. On the other hand if we are to find more effective methods of education, there is much to be said for trying to get some people of extraordinary ability in teaching.

Your Professional Library

Recent publications which the school administrator will want to read, to pass along to associates, or "to have heard of."



The Administration of Public Education

By John T. Wahlquist, et al, The Ronald Press Company, New York. 1952, 611 pp., \$6.00.

The actual, everyday problems of school administrators are given uncommonly explicit treatment in this survey text for experienced or novice educators. The many aspects of administration are well covered; democratic theory and practices are stressed.

Other professors of educational administration collaborating with Professor Wahlquist of San Jose State College are William E. Arnold, University of Pennsylvania; Roald F. Campbell, Ohio State; Theodore L. Reiler, University of California at Berkeley; and Lester B. Sands, University of California, Santa Barbara.

The Development of Modern Education

By Frederick Elby, Prentice-Hall, Inc., New York. Revised 1952, 719 pp., \$6.00.

That a history of the theory and practice of education is at the same time so condensed and so enjoyably readable is an achievement of note. Professor Elby of the University of Texas has made extensive revisions from the 1934 edition. The text is for advanced students.

The Practical Pedagogue

By Harold S. Bootwick and Samuel C. Garsten, School Shop Aids, Box 3216, Philadelphia 21. 1952, 64 pp., \$1.65.

"Go to other books for theory," the authors say, for theirs is a practical manual on the "mechanics" of teaching. Mainly for shop teachers, common sense advice is given on daily procedures, of which the new teacher especially has small repertoire.

American Secondary Education

Edited by Paul B. Jacobson, Prentice-Hall, Inc., New York. 1952, 468 pp., \$4.75.

For undergraduates studying to be high school teachers, this symposium gives an excellent introduction to teaching as a career, school-society relationships, curriculum structure, pupil and teacher personnel programs, theories of evaluation, and progress reporting.

Cooperative Procedures in Learning

By Alice Miel and Associates. Horace Mann-Lincoln Institute of School Experimentation, Teachers College, Columbia University. 1952, 512 pp., \$5.75.

Pictures of "what cooperative learning procedures look like" are conveyed through detailed and verbatim reports on experiments in teaching methods carried out at the Horace Mann-Lincoln Institute of School Experimentation. Most of the activities described were at the elementary level. They were

predicated upon the idea that experience is the best teacher of cooperative group procedures.

Bases for Effective Learning

31st Yearbook, Department of Elementary School Principals, NEA, Washington 6. September, 1952, 390 pp., \$3.00.

Ideas and experiences on effective elementary school learning and teaching are contributed by 47 principals, supervisors, and professors. The principal, teacher, pupil, and school-community relations are in turn the focus for suggestive practices on improving the elementary learning situation.

Education in California

By Roy W. Cloud, Stanford University Press. 1952, 296 pp., \$6.00.

The development of California schools and colleges is reviewed in detail. The history was prepared by Roy W. Cloud, for 20 years (1927-47) executive secretary of the California Teachers Association. Mr. Cloud died in the summer of 1952, and this volume is fittingly dedicated to his memory.

Wellsprings of Democracy

By John M. Brewer, Philosophical Library, New York. 1952, 232 pp., \$4.50.

Dr. Brewer was associate professor of education, Emeritus, at Harvard; he died in 1950. In this book he set forth his ideas on the importance of local, voluntary organizations and described how they should function.

Local organizations he called "feeders" of democracy as streams are feeders of rivers. To strengthen the structure and operation of such organizations, he outlined rules of elementary good government. He gives the spirit as well as the letter of proper parliamentary procedure.

Who Should Go To College

By Byron S. Hollinshead Columbia University Press. 1952, 190 pp., \$3.00.

To what extent are we developing our human resources? This comprehensive inquiry on that question was sponsored by the Commission on Financing Higher Education, which in turn is sponsored by the Association of American Universities.

College attendance is shown to be dependent upon academic ability, family income, race, sex, geography, and social status. A great intangible, motivation, is explored, and in a final and separate chapter is statistically examined.

It is proposed that without interference with the stability and freedom of our present structure of higher education, the program should be enlarged to educate a higher proportion of those capable of intellectual leadership.

The same lighting KNOW-HOW that lighted the huge Los Angeles Coliseum . . .



. . . is available to **YOU**



Crouse-Hinds Type LCE-1120
Long-Range Floodlight
for use where lighting towers
are at a great distance
from the playing field.



Crouse-Hinds Type FLA
The ideal floodlight
for general sports lighting.

The Los Angeles Coliseum is one of the world's largest football stadiums with a capacity of 105,000 people. The proper lighting of this huge amphitheater called for skilled planning and the best of floodlighting equipment. Crouse-Hinds experienced illumination engineers designed the installation and Crouse-Hinds long-range heavy-duty Type LCE-1120 Cast Aluminum Floodlight was selected for the job because it is ideal for use where the light must be projected a great distance.

Crouse-Hinds Illumination Department has also planned the lighting of hundreds of small and medium size fields, and the know-how that they have accumulated through long years of experience is at your service. Crouse-Hinds Type FLA Floodlight has the characteristics that make it ideal for the efficient lighting of small fields or the average size stadium. It's economical too!

Night games draw BIG crowds. When the above photograph was taken there were 90,910 people in the Coliseum. It's the same story in small towns, many more people turn out for night games. Get your share of the extra revenue that night games bring in. Start planning NOW for floodlighting your field for next season's games. Send drawings and details, and Crouse-Hinds illumination engineers will gladly recommend the proper selection and arrangement of floodlights for any application.

CROUSE-HINDS COMPANY Syracuse 1, N.Y.

OFFICES: Albuquerque - Birmingham - Boston - Buffalo - Chicago - Cincinnati - Cleveland - Dallas - Denver
Detroit - Houston - Indianapolis - Kansas City - Los Angeles - Milwaukee - Minneapolis - New York
Philadelphia - Pittsburgh - Portland, Ore. - San Francisco - Seattle - St. Louis - Tulsa - Washington
RESIDENT REPRESENTATIVES: Albany - Atlanta - Baltimore - Charlotte - New Orleans - Richmond, Va.
Crouse-Hinds Company of Canada, Ltd., Toronto, Ont.



FLOODLIGHTS • AIRPORT LIGHTING • TRAFFIC SIGNALS • CONDULETS

New Power! New Economy!
New Dependability!



Now, in 1953, Chevrolet school bus chassis, long famous for ruggedness and dependability, offer new and even greater stamina with stronger, sturdier construction. They offer new power with the advanced Loadmaster engine in 212-inch and 199-inch wheelbase school bus chassis . . . yet bring you even greater gasoline mileage.

You can be sure of finding a Chevrolet chassis that is the right size—and has the right features—for your needs. Your Chevrolet dealer will be more than glad to help you get both the proper chassis and special body to fit your requirements. Chevrolet Division of General Motors, Detroit 2, Michigan.

212-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 13,500 or 16,000 pounds, depending on tire equipment. Accommodates bodies of 48- to 54-pupil capacity. Chevrolet Loadmaster valve-in-head engine, 200 foot-pounds torque (pulling power) at speeds governed under 35 m.p.h. Heavy-duty brakes; Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

199-INCH WHEELBASE SCHOOL BUS CHASSIS

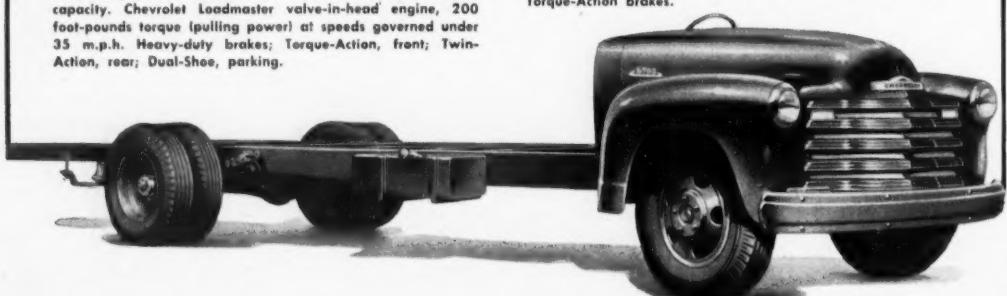
Gross vehicle weight, 13,500 or 16,000 pounds, depending on tire equipment. Accommodates bodies of 42- to 48-pupil capacity. Chevrolet Loadmaster valve-in-head engine, 200 foot-pounds torque (pulling power) at speeds governed under 35 m.p.h. Heavy-duty brakes; Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

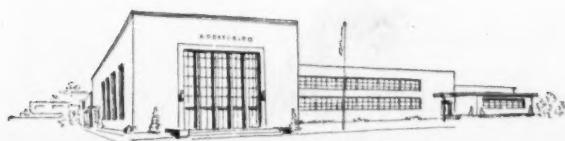
161-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 10,500 or 12,000 pounds. Accommodates bodies of 30- to 36-pupil capacity. Chevrolet Thriftmaster valve-in-head engine, 176 foot-pounds torque (pulling power) under 35 m.p.h. governed speed. Heavy-duty brakes; Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

137-INCH WHEELBASE JUNIOR SCHOOL BUS CHASSIS

Gross vehicle weight, 7600 pounds. Accommodates bodies of 16-pupil capacity. Chevrolet Thriftmaster valve-in-head engine, 176 foot-pounds torque (pulling power) under 35 m.p.h. Torque-Action brakes.





Phillips High School Auditorium, Phillips, Texas, equipped with 800 full-upholstered Bodiform chairs. Architect: Wm. C. Townes, Amarillo, Texas. Superintendent: Lee Johnson.



*For maximum beauty and comfort, better acoustics,
equip your auditorium with*

AMERICAN BODIFORM. UPHOLSTERED CHAIRS

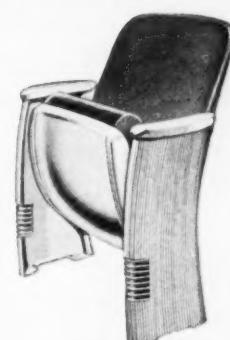
American Bodiform upholstered chairs afford the highest serviceability, and stimulate fresh interest, responsiveness, and pride among both students and community.

Best looking—most restful. No other chair equals American Bodiform in contributing beauty and impressiveness to a school auditorium. Matchless comfort is assured by seats with spring-arch construction, and backs with scientific, body-fitting contours. Occupants needn't squirm and twist seeking restful posture—therefore are more attentive to speakers.

Safety-fold action—Better acoustics. Automatic, uniform-folding, silent, $\frac{3}{4}$ safety-

fold seat action allows more room for passing—and also for sweeping and cleaning. No pinching or tearing hazards. When an auditorium is only partially filled, the full-upholstery of these chairs compensates, acoustically, for any lack of occupancy.

Unexcelled durability—decorative harmony. Long life and low maintenance are insured by engineering skill and experience without equal in the seating industry. A wide range of styles, colors and upholstery materials permits harmony with any decorative scheme. American Seating Engineers will gladly help you plan. Write for information.



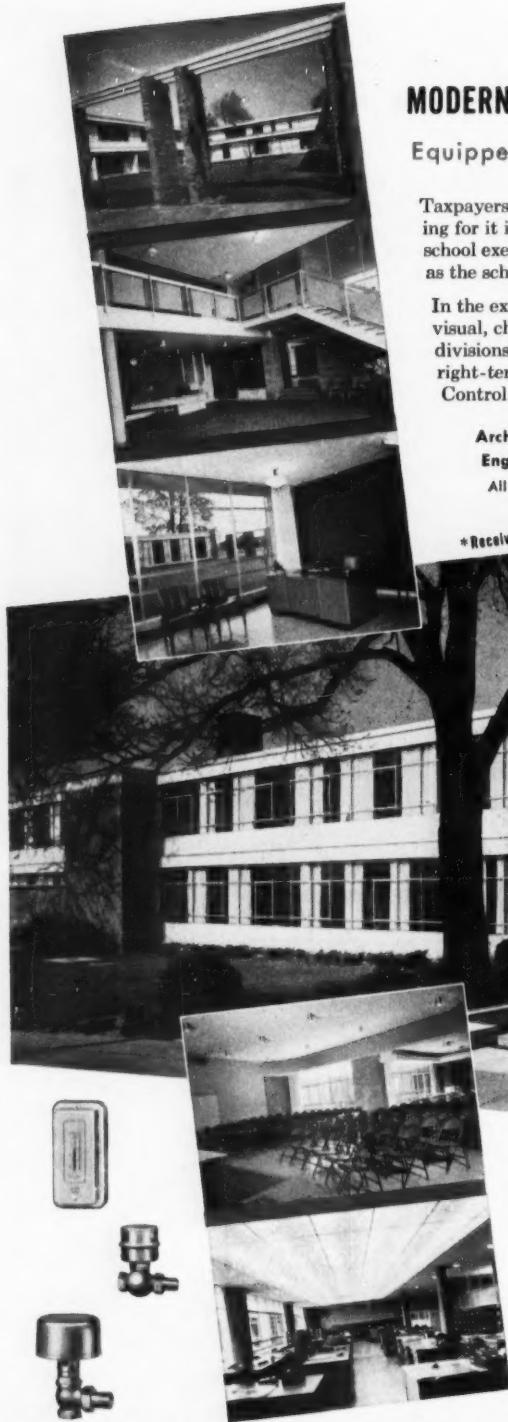
**American Bodiform
Auditorium Chair**

Best full-upholstered auditorium seating obtainable—with finest modern styling and most advanced functional features. Also available with tablet-arm.

American Seating Company

WORLD'S LEADER IN PUBLIC SEATING

Grand Rapids 2, Mich. • Branch Offices and Distributors in Principal Cities
Manufacturers of School, Auditorium, Theatre, Church, Transportation, Stadium Seating, and Folding Chairs



Seattle's Efficient
MODERN SCHOOL ADMINISTRATION BUILDING*
 Equipped with **POWERS** Temperature Control

Taxpayers in Seattle may well be proud of this attractive building for it is an outstanding example of the trend to provide school executives with facilities as efficient and modern as the schools under their supervision.

In the executive offices, conference rooms, library, audio-visual, child guidance, medical service and P. T. A. divisions, cafeteria, 200-seat auditorium and other spaces right-temperated-air is assured by a Powers Pneumatic Control System.

Architects: J. Lister Holmes & Associates

Engineers: Marius Anderson & Associates

All of Seattle, Wash.

*Received Honor Award from Washington State Chapter A.I.A.

Dearborn-Massor Photos



POWERS Pneumatic Systems
 of
 Temperature Control

... prevent OVER-heated rooms. Greater comfort, lower fuel bills and many years of dependable service make Powers control a highly profitable investment. Contact our nearest office for help in solving your temperature control problems.

Established in 1891 • **THE POWERS REGULATOR COMPANY** • SKOKIE, ILL. • Offices in Over 50 Cities

(b1)

New!

Look what Powers has done to **Modernize** Control Valves

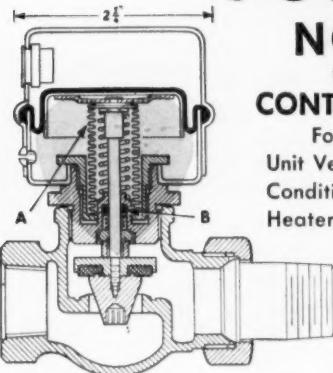
Powers NO-PAK Valves Banish Packing Maintenance
Prevent leakage of water or steam or loss of vacuum

POWERS

NO-PAK Pneumatic CONTROL VALVES

For Convector,
Unit Ventilators, Unit Air
Conditioners, Baseboard
Heaters, Radiators, etc.

Various Types
and Sizes for
all requirements



Real ECONOMY

— year after year!



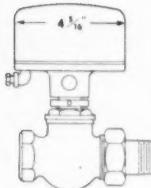
Another POWERS Contribution to Better Heating and Air Conditioning Control

NO-PAK valves with their many advantages are now standard with Powers temperature control systems. Their superior performance is due to Duo-Seal construction.

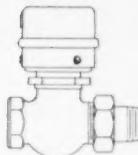
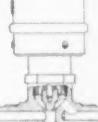
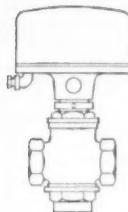
Bronze Packless Bellows (A) in sectional view above, is the primary seal which eliminates packing maintenance — packing friction — steam and water leakage or loss of vacuum. It is designed to withstand pressure up to 150 psi. Maximum valve stroke is only two-thirds of the normal bellows stroke.

A spring loaded secondary seal (B) permits servicing of valve top without draining the water system or shutting down the steam heating system. Seal is made of highly elastic neoprene and is ready to act at any time. Small contact between seal and the highly polished stainless steel stem makes friction a negligible factor.

For utmost dependability and lowest cost maintenance specify control by Powers NO-PAK Valves.



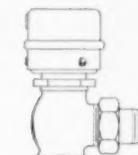
Straightway Union
3-Way Screwed Ends



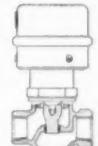
Straightway Union



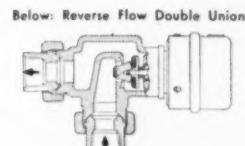
Flared Ends



Angle Union



Angle Union
←Screwed Ends



Below: Reverse Flow Double Union



Established in 1891 • THE POWERS REGULATOR COMPANY • SKOKIE, ILL. • Offices in Over 50 Cities

February, 1953

GREAT NAMES *and* GREAT CAUSES

The great names which are a part of February
quicken the emotions of good Americans.

Names like Washington and Lincoln reflect the
convictions and the freedoms of our nation.

Voluntary support of our institutions of public
health, welfare, and education is one of the finest
privileges of a free people.

AMERICAN CITY BUREAU *(Incorporated 1913)*

*Public Relations
Fund-Raising*

221 North La Salle Street, Chicago 1, Illinois
470 Fourth Avenue, New York 16, N. Y.

Charter Member American Association of Fund-Raising Counsel

OUR FORTIETH ANNIVERSARY YEAR

Right...FROM THE START!



...that's why we want

the LOXIT Complete CHALKBOARD SYSTEM

Check THESE IMPORTANT POINTS ON CHALKBOARD TRIM

- All-aluminum—engineered for trouble-free service.
- It is fireproof—because it is all metal.
- The finish is "GLO-DULL"® anodized aluminum—stays permanently beautiful.
- Spring-type suspension compensates for expansion, contraction and settlement—helps prevent the breaking or buckling of boards.
- Trim cannot warp, contract or expand—never needs painting or refinishing.
- Easy to install.



Write for additional information,
including literature, catalogs and
samples—

Simple to Erect! Easy to maintain! Beautiful in Appearance!
Assures Years of Trouble-free Service!

LOXIT OFFERS THIS COMPLETE SERVICE:

- 1 A beautifully designed, all-aluminum, snap-on chalkboard trim for both surface-applied and plastered-in jobs. The anodized "GLO-DULL"® finish remains permanently beautiful and is easy to keep clean.
- 2 LOXIT-TYLAC RITE GREEN Chalkboards, both the Junior $\frac{1}{4}$ " thick and the Senior $\frac{1}{2}$ " thick.
- 3 LOXIT-TYLAKORK Tackboards in a choice of six colors: Autumn Tan, Spring Green, Twilight Gray, Sun Tan, Leaf Green and Roadside Green.
- 4 Loxit Horizontal Sliding Boards.
- 5 Loxit Vertical Sliding Boards.
- 6 Loxit Reversible Easel Boards.
- 7 Loxit Bulletin Boards of all kinds.
- 8 Loxit Display and Trophy Cases.
- 9 Loxit Technical Service available, without obligation, to architects, contractors and school authorities to help solve any and all problems in this field.

*Reg. U. S. Pat. Offce

LOXIT-TYLAC RITE GREEN CHALKBOARDS • LOXIT-TYLAKORK TACKBOARDS



RITE GREEN Chalkboards meet all classroom requirements. Excellent writing surface—easy erasing—strong—waterproof—washable. The color is just the RITE GREEN for low reflectivity and high readability.

The Tackboards are fabricated from standard cork, compressed under high pressure. Pins and thumbtacks enter the cork easily so they hold tight—and the holes close when they are removed. In six colors.



LOXIT SYSTEMS, INC., 1217 W. WASHINGTON BOULEVARD, CHICAGO 7, ILLINOIS

Snyder

BEATTY ROLLWAY GRANDSTAND BLEACHERS



INDOOR



Snyder
HEAVY DUTY
GRANDSTANDS and
BLEACHERS

OUTDOOR



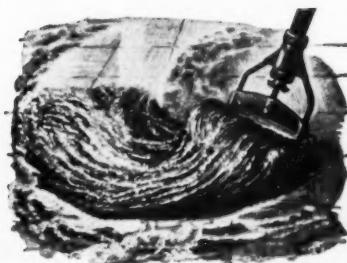
PORTABLE • SECTIONAL • PERMANENT

Estimates or help in planning available to you at any time without obligation, so if you have a seating problem why not visit our display, at the American Association of School Administrators Convention. Our representative will be in Booth Nos. 1036 & 1038 and will be glad to discuss Snyder interior or exterior installations with you.

SNYDER TANK CORPORATION

P.O. BOX 14, BUFFALO 5, NEW YORK

P.O. BOX 2390, BIRMINGHAM 1, ALABAMA



Stop burning your floors with t.s.p.

and other harsh cleaners!

tri-sodium phosphate

**Be safe! Strip
old wax with...**

**JOHNSON'S
FLOOR
CLEANER**
Concentrate

**Be safe! Wipe
away dirt with...**

**JOHNSON'S
Emerel
SUPER CLEANER**

Developed specifically for wax stripping—Johnson's Floor Cleaner Concentrate has the power to cut old wax layers fast. But this special Johnson formulation *contains no caustic chemicals to damage floors!* Quickly and safely Floor Cleaner Concentrate softens all stubborn film for easy removal.

Safe on any type of flooring, including rubber and asphalt tile. Makes most economical wax stripping solution.

Johnson's Emerel breezes through everyday cleaning *without* the harmful effects of harsh cleaners. Emerel takes on oil, grease, soap scum, dirtiest surfaces in split-second stride. Cleans all washable surfaces without scrubbing. Perfect for damp-mopping *waxed floors* because just a quick buffing restores original wax brilliance.

Absolutely safe on all washable surfaces: walls . . . woodwork . . . any type of floor. Costs only pennies per gallon of solution.

For free demonstration call your Johnson's Wax Distributor or write to:
Maintenance Products, Dept. SE-2 S. C. Johnson & Son, Inc., Racine Wisconsin

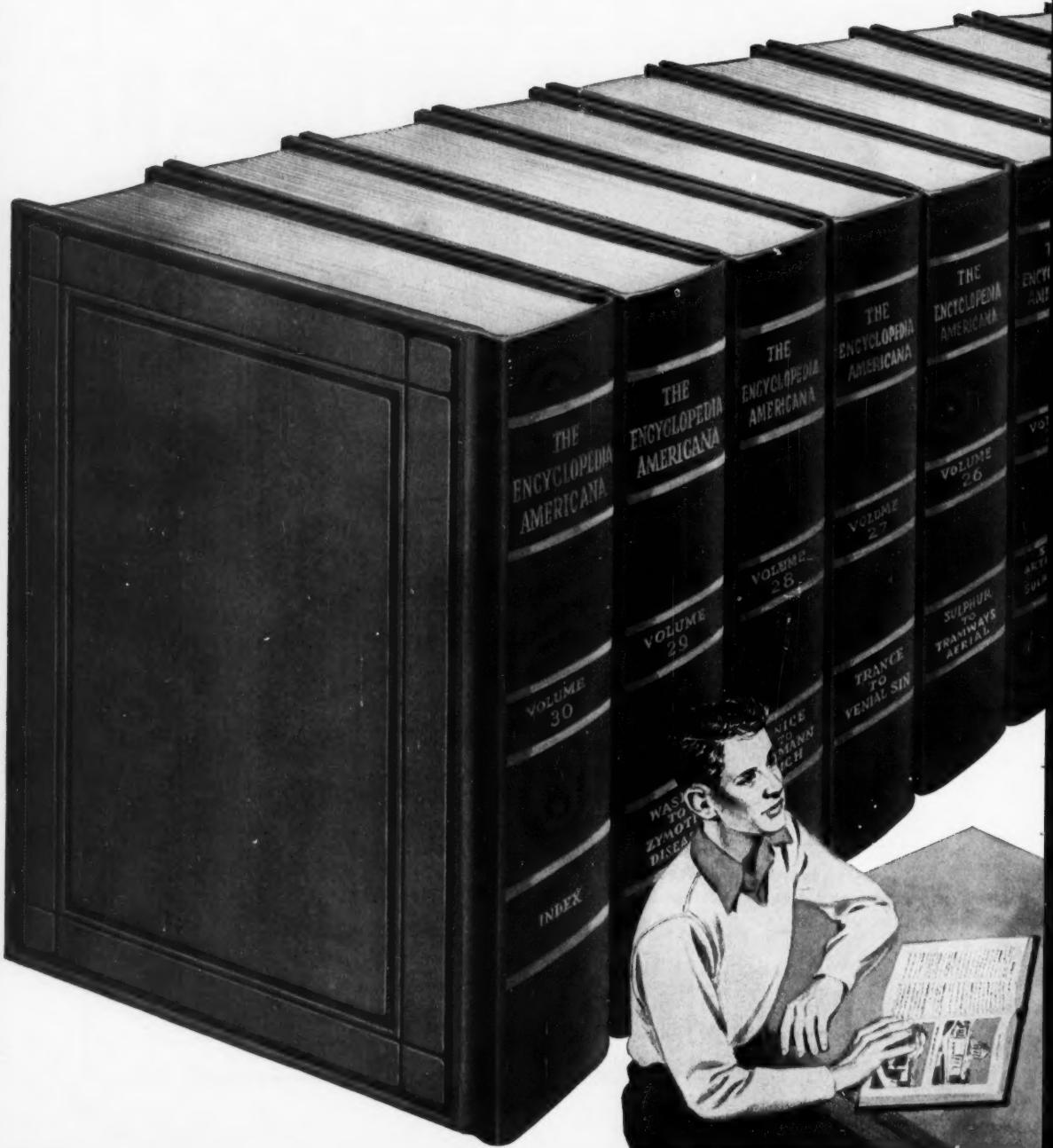


Products of JOHNSON'S WAX Research

"Johnson's" and "Emerel" are trademarks of S. C. Johnson & Son, Inc.

Announcing ...

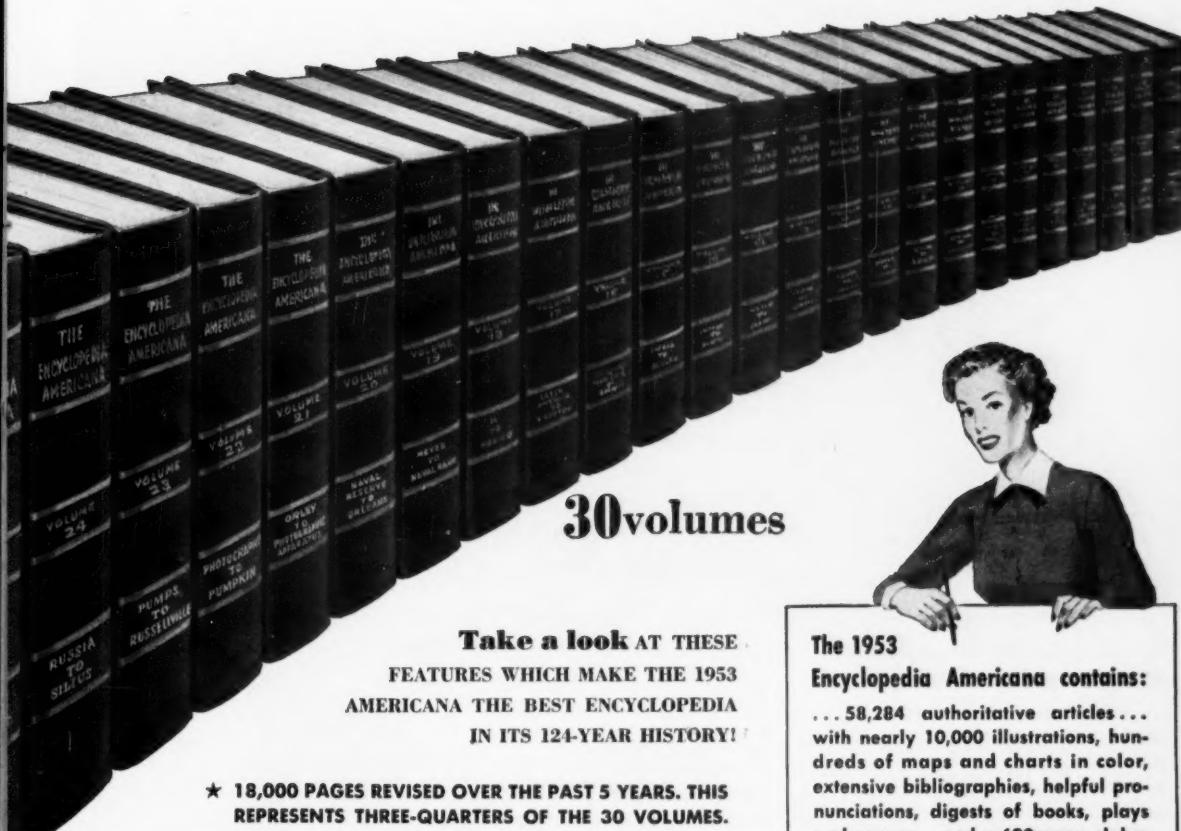
the 1953 Edition...



The Encyclopedia

SE-15

AMERICANA



30 volumes



**Take a look at these
features which make the 1953
AMERICANA THE BEST ENCYCLOPEDIA
IN ITS 124-YEAR HISTORY!**

- ★ 18,000 PAGES REVISED OVER THE PAST 5 YEARS. THIS REPRESENTS THREE-QUARTERS OF THE 30 VOLUMES.
- ★ 4,054 PAGES COMPLETELY REVISED AND RESET FOR THIS YEAR ALONE
- ★ 4,326 NEW ILLUSTRATIONS ADDED SINCE 1950 WITH 1,350 INSERTED FOR 1953
- ★ 183 NEW COLOR ILLUSTRATIONS FOR 1953

... Complete 1950 U. S. Census figures included for all states, cities and territories... a new and important study of the Middle East... new articles on Korea, Israel, Greece, Children's Literature, the Bible, NATO, SHAPE, Nuclear Engineering, and many other subjects of current interest...

These are reasons why you'll want to own the 1953 Americana!

We urge you who teach, or lead others through the world of books—those of you who appreciate the importance of education know-how in reference material—to write us today.

Attractive trade-in allowances available to schools, libraries.

Americana Corporation
(Educational Division)

2 WEST 45th STREET, NEW YORK 36, N. Y.

**The 1953
Encyclopedia Americana contains:**

... 58,284 authoritative articles... with nearly 10,000 illustrations, hundreds of maps and charts in color, extensive bibliographies, helpful pronunciations, digests of books, plays and operas... and a 690-page alphabetical and topical INDEX—key to more than a quarter of a million facts.

Free!

Fill out and mail coupon today for a beautiful illustrated booklet.



AMERICANA CORPORATION
EDUCATIONAL DIVISION

2 West 45th St., New York 36, N.Y.

Gentlemen: Please send me without obligation your 36 page illustrated booklet describing the 1953 ENCYCLOPEDIA AMERICANA.

Name _____

Address _____

City _____ State _____

Title (if any) _____

SE

Griggs modern school seating...



The Skyliner chair desks are of the most modern design, and provide classroom seating of exceptionally beautiful appearance, genuine comfort, functional convenience, and great durability. Available with genuine Formica on the hardwood plywood tops to withstand severe service and resist scratching.

The colors available on the metal frames are Beige, Taupe, Coral, Sage Green, and Ocean Blue. The beautiful hardwoods are finished natural as standard. The woods are available in school brown at no extra cost.

Beauty Bonded
FORMICA
Reg. U.S. Pat. Off.

The Skyliner chair desks are available in three sizes, 17", 15", and 13" seat heights.



The desk top is easily adjusted to assure correct height.

See the complete Griggs line of school seating at the AASA convention in Atlantic City, February 14-19. Booth Numbers 1326-28-30.



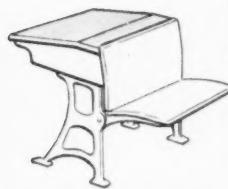
Griggs Airliner tubular furniture provides modern design, comfort, and convenience for all ages from Kindergarten through College.

The Airliner tubular tables are available with genuine Formica faces on the tops.

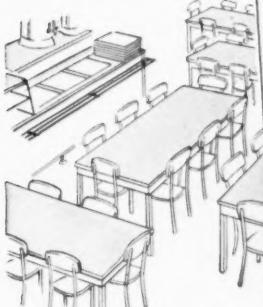
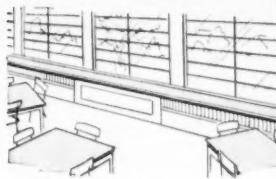
BELTON, TEXAS
MANUFACTURERS OF SCHOOL, CHURCH, AND THEATRE SEATING

Request Griggs Seating catalog for full information on classroom seating!

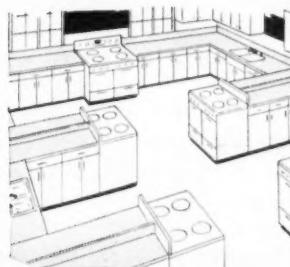
If every school day they were like this-



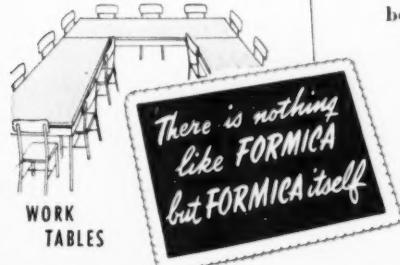
RESURFACE OLD DESKS

CAFETERIA TABLES
AND COUNTERS

WINDOW STOOLS



HOME ECONOMIC KITCHENS

WORK
TABLES

*There is nothing
like FORMICA
but FORMICA itself*



**you
wouldn't need
FORMICA surfaces**

Formica Topped Desks by
Griggs Equipment Co., Belton, Texas

but, they're not and you do!

Beautiful rugged Formica is as close to being child-proof as you could ask. It resists scratching and stains of all kinds. Ink, pencil, crayons and just plain dirt wipe off with only a damp cloth.

In ordering new desks and tables specify to the manufacturer that you want Formica tops. Present school furniture can be resurfaced with Formica by regular Formica fabricators or in your own woodworking shops.

Cafeteria tables and counters are ideal for Formica in more than 100 color patterns and wood grains. Home economic kitchens and window stools need Formica for beauty and utility.

Write Formica for the name
of a fabricator near your
school or for "on the job"
instruction in Formica ap-
plications. **FORMICA**,
4576 Spring Grove Ave-
nue, Cincinnati 32, Ohio.



Nature Controls the Heat . . .



James Solomon Russell School, Brunswick County, Va. Total square footage - 67,356. Cost \$524,870. Heating Contractors: W. J. Bloomfield & Son, Inc., Farmville, Va.

Dixon & Norman, Virginia architectural firm specializing in schools, specify Webster Moderator Systems for efficient heat in open-plan buildings fed by long steam lines.

"Nature makes the weather, let her operate the controls" — so say Dixon & Norman, Richmond architects and engineers.

Dixon & Norman use centrally controlled continuous flow steam heating systems in

all of their larger schools — for comfort and economy. In each of the schools illustrated, heating is controlled with a Webster Electronic Moderator System.

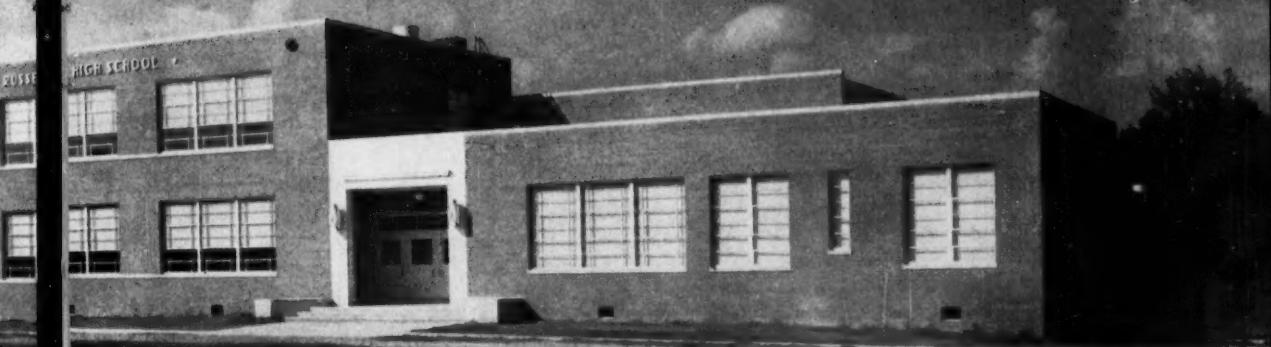
"Many of our schools are also used for community activities," Dixon and Norman point out. Classrooms are larger than average and auditoriums, gymnasiums and shop areas are in separate wings. Despite long steam lines, there is no concern about balanced heat distribution because the Moderator System delivers heat evenly and rapidly to every section of a building. Its simplicity makes it ideal for areas where skilled maintenance help is lacking."

The Webster Moderator System gives Dixon & Norman "the opportunity of using unit heaters, unit ventilators and other blast loads on the same mains because they are constantly supplied with steam, even in mild weather. This saves the expense of installing additional long steam mains and feeding them directly from boiler pressure."

Montevideo High School, Montevideo, Va. Total square footage - 75,268. Cost - \$622,740. Heating Contractors: J. H. Cothran Co., Inc., Altavista, Va.



... in these Schools



For information about Webster Products for school heating, call the Webster Representative or write us.

Address Dept. SE-2

WARREN WEBSTER & COMPANY
Camden 5, N. J. Representatives in Principal U. S. Cities

In Canada, Darling Brothers, Limited, Montreal

WEBSTER
MODERATOR
SYSTEM
OF STEAM HEATING

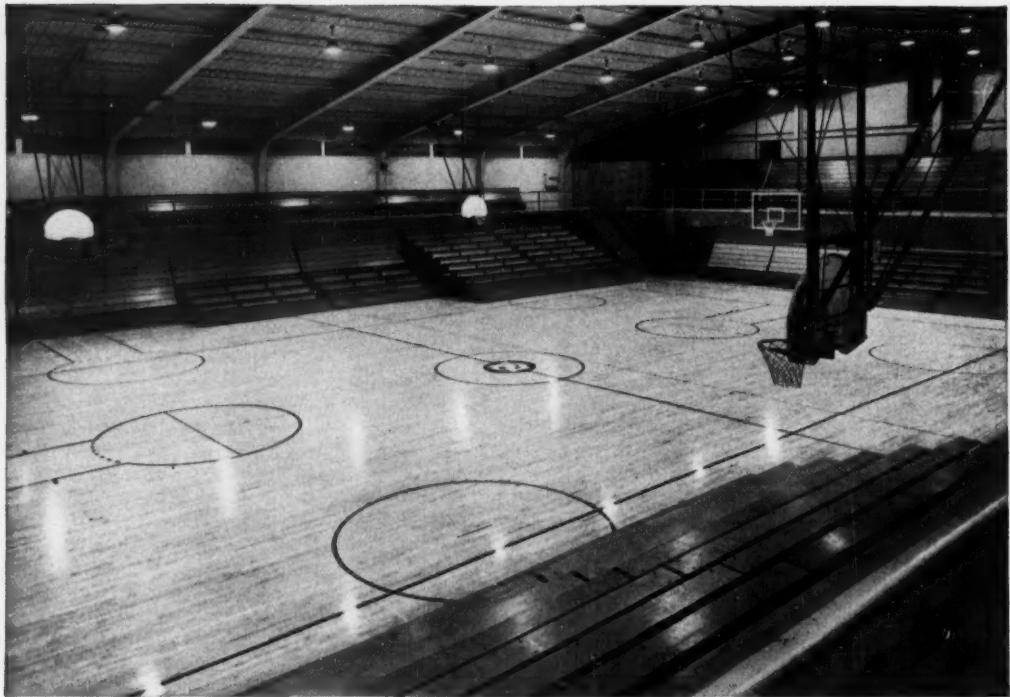
"Controlled by the weather"

Hermitage High School, Richmond, Va. Total square footage - 91,105. Cost - \$928,680. Heating Contractors: W. H. White, Plumbing & Heating, Richmond, Va.



(Center) Union High School, Caroline County, Va. Total square footage - 36,118. Cost - \$432,000. Heating Contractors: J. H. Cothran Co., Inc., Altavista, Va.

John J. Wright School, Spotsylvania County, Va. Total square footage - 57,867. Cost - \$635,000. Heating Contractors: W. J. Bloomfield & Son, Inc., Farmville, Va.



St. Mary's High School, Phoenix, Ariz.—Lescher & Mahaney, architects

On Main Floor, Balcony... All Around the Gym

Universal Roll-A-Way Stands Assure Safe and Comfortable Seating Plus Valuable Extra Floor Space Whenever Needed

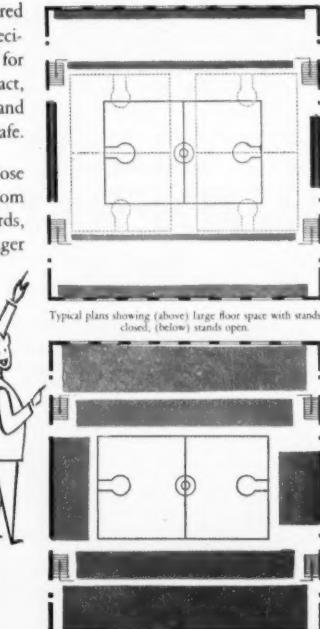
With today's building costs at such high levels, the plans for any gymnasium should provide maximum seating facilities and maximum useable floor space in minimum area. Such requirements often seem "impossible" to meet, yet they are actually easy... the *Universal* way!

The modern gymnasium illustrated above is a good example. With *Universal* Roll-A-Way Stands on both main floor and balconies, ample seating facilities are provided for basketball games and other school events. But, when not in use, these stands may be rolled back to the walls on both levels... providing approximately 5,000 feet more floor space for practice courts and other

gymnasium activities. Carefully engineered and custom built to meet individual specifications, Roll-A-Way Stands are ideal for large capacity or small. They are compact, yet roomy and comfortable... neat and attractive... exceptionally strong and safe.

Improved vertical filler boards enclose Roll-A-Way's entire understructure from front view, add more rigidity to seat boards, make the complete stands even stronger and more substantial. Because of their centered positions, these filler boards do not interfere with spectators' leg room... permitting feet to be drawn back under seats in normal positions. Comfort is assured!

Investigate Roll-A-Way Stands today. Write for latest catalog, list of *Universal* installations, and working scale blueprints of two-level seating.



Typical plans showing (above) large floor space with stands closed, (below) stands open.

UNIVERSAL BLEACHER COMPANY
606 SOUTH NEIL STREET • CHAMPAIGN, ILLINOIS

Only

DURA-DÉCOR

FABRICS
-FOREVER FIRE-RESISTANT-
OFFER SCHOOLS ALL THREE

Beauty
Fire-Safety
No upkeep
Budget

A SAFE SCHOOL POLICY!

ALWAYS SPECIFY DURA-DÉCOR FABRICS

OF COATED FIBERGLAS*



* Woven of Fiberglas (T.M. Reg. U.S. Pat. Off. Owens-Corning Fiberglas Corporation) Yarns.



DURACOTE CORPORATION
RAVENNA, OHIO

Makers of Coated Fiberglas Fabrics:
DURA-DECOR Drapery and Curtain Fabrics — DURATARP Athletic Field Covers — Aircraft
Interior Fabrics — Industrial and Military Protective Fabrics and Covers.

DURA-DECOR Fabrics—in many beautiful colors and distinctive patterns and with excellent draping qualities—mean permanent fire-safety—no costly, doubtful flameproofing treatments. In case of an on-stage fire, the Fiberglas reinforcing cloth actually acts as a fire barrier—could prevent the spread of fire to the auditorium!

What's more, the surface of DURA-DECOR Stage Curtains, Window Drapes and A-V Darkening Curtains cannot catch and accumulate highly flammable lint and dust as do "fuzzy", hazardous fabrics. DURA-DECOR ends cleaning problems—no absorption of dirt. Even severe soiling washes off with soap

and water; just clean the spot with curtains and drapes in place.

DURA-DECOR Fabrics are mildew- and rot-proof. They won't crack, harden or peel—welcome abusive service conditions—eliminate fading problems. An approved Major Decorating Studio in your vicinity is qualified to adapt DURA-DECOR to your needs. LOOK for this seal



DURACOTE CORPORATION, Department 54
Ravenna, Ohio

Please send me the information checked below:
 DURA-DECOR Stage Curtains Window Drapes
 DURA-DECOR Room-Darkening Curtains
 Name and address of nearest Approved Major
Decorating Studio

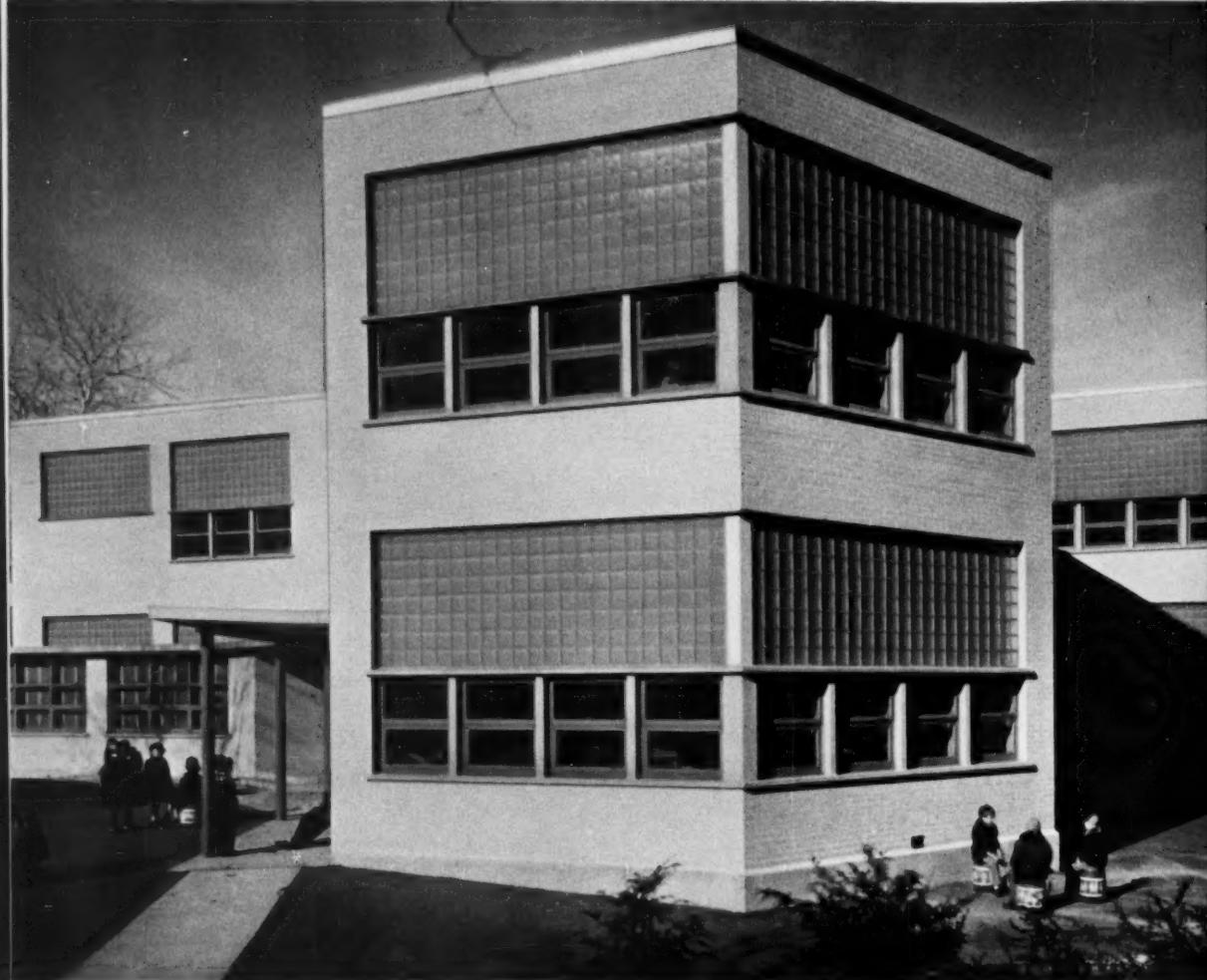
Name _____

Title _____

Organization _____

City _____ Zone _____ State _____

"PC Glass Block panels give us plenty



ONLY PC GLASS BLOCKS GIVE ALL THESE ADVANTAGES

- Better Daylighting
- Less Maintenance
- Reduced Heating Costs
- Less Outside Noise
- Greater Privacy
- More Comfortable Interiors
- Attractive Appearance
- "Clean-Easy" Face Finish

Architect: Emil A. Schmidlin, East Orange, N. J.;
General Contractor: Frank Belluscio and Sons, Inc., Unionville, N. J.

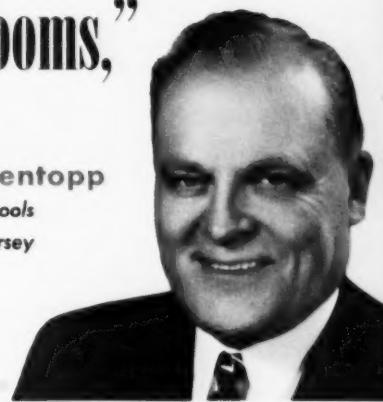
of soft, almost shadowless daylight

in our classrooms,"

says **Dr. Henry E. Kentopp**

Superintendent of Schools

East Orange, New Jersey



THE classrooms of the new Stockton School addition in East Orange, New Jersey, are hexagonally shaped because this makes possible improved grouping of pupils, more effective class discussions, maximum flexibility, and improved space utilization. PC Soft-Lite* Prism B 55 glass blocks were chosen for the daylighting panels.

Dr. Kentopp has stated: "By using great care in the selection of prismatic glass block, placed over a vision strip, the daylight in our classrooms (28 feet wide) is so well blended that even when the illumination on the darkest desk gets up to 80 foot candles, the result is restful and very comfortable . . . I feel that prismatic glass block is the most effective means of controlling and reflecting daylight across classrooms. Clear glass, in practice, has to be covered with shades to prevent excessive glare . . . Not one teacher has asked for shades over our glass block panels. Electric lighting is necessary only on the darkest days."

PC Glass Blocks can provide these and many other advantages to *your* school. Why not let us tell you about them? Just fill in and return the coupon. There is no obligation.

*T. M. Reg. applied for.

Pittsburgh Corning Corporation

PITTSBURGH 22, PA.

Pittsburgh Corning Corporation
Dept. 230
Pittsburgh 22, Pa.

Please send me a FREE copy of your booklet on the use of PC Glass Blocks in schools and other public buildings.

Have engineer call to discuss specific problem.

Name Title

Address

City Zone State



Vers-A-Tilt belongs in your classroom

PATENT APPLIED FOR



MODERN FUNCTIONAL STYLING

AMERICA'S MOST WANTED CHALKBOARD

Modern styling and flexibility keynote this new Vers-A-Tilt chalkboard by Claridge. Incorporating a tilted surface to eliminate glare from natural and artificial light, the board itself is reversible, enabling the unit to be used as a chalkboard or tackboard.

A completely prefabricated unit, the new Vers-A-Tilt is installed in minutes, thus saving expensive installation costs.

Designed with the needs of today in mind, the Vers-A-Tilt may be readily adapted to the needs of tomorrow. Without any major alterations, as required by conventional chalkboards, the entire unit can be changed from a 1st grade height to that of an 8th grade in a matter of minutes. The special design enables the unit to be moved up or down 10 inches in multiples of 1 inch utilizing only the original fastenings.



Slide the chalkboard panel out of the Vers-A-Tilt frame and presto . . . it becomes a handy tackboard. The Vers-A-Tilt is easy to change, may be done by teacher or student. Storage space behind the board is useful for storing maps, art materials, papers and many other school supplies.



The tilted surface of the Vers-A-Tilt eliminates glare from artificial and natural light, a condition normally found in conventional chalkboards. The Vers-A-Tilt promotes better penmanship since students assume a more natural writing position.

VISIT OUR EXHIBIT AT BOTH NATIONAL CONVENTIONS IN ATLANTIC CITY

N.E.A. CONVENTION • FEB. 14-FEB. 19, 1953 • BOOTH NO. 1235
N.C.E.A. CONVENTION • APR. 7-APR. 10, 1953 • BOOTH NO. 17

Please send more Vers-A-Tilt information to:



4608 W. 20th St.
Chicago 50, Illinois

Name _____

Position _____

School _____

Address _____

City _____ Zone _____ State _____

Citizens Committee Saves a Technical High

HARRY A. LITTLE

Superintendent, Little Rock Public Schools
Little Rock, Arkansas

ONE of the most successful ventures of the past year in the Little Rock Public Schools has been the use of a citizens committee for the study of the Technical High School. It has proved to be a significant example of the use of the community in determining school policy.

Until 1943, one senior high school served all white pupils in Little Rock. The program included several trade and vocational courses. In that year a separate Technical High School, fully accredited by the State Department of Education, was organized for boys in the tenth, eleventh and twelfth grades. This school has been operated in a building erected by the National Youth Administration and given to the city.

Low Attendance

Attendance at the Technical High School did not grow as expected. In 1951-52, the enrollment was 150 boys,

while about 2,000 pupils continued to attend the other high school.

In 1948, a Peabody survey of Little Rock Schools recommended that, "A permanent center for vocational education is needed on a site closer to the industrial and business area." A proposed program for the school was not discussed.

In 1950-51, the financial status of the district caused a demand for abolition of Tech High School, with its work to be combined with the courses offered at the original senior high school. This was considered at length by the professional staff and the school board. The board authorized its president to appoint a committee of five interested persons in the city to study and report on the curriculum and operation of Tech High School.

The president appointed five local industrial and business leaders who agreed to serve on this committee: E. Eugene Smith, sales manager for

an automobile parts distributor; Donald E. Dick, plant superintendent for a paint manufacturing company; Claude Holbert, partner in a flying service; John Powell, plant superintendent for a foundry; and B. E. Ryan, engineer with the municipal water works.

Committee members were instructed to look into the need for such a school, evaluate its operation and determine whether or not it served Little Rock youth adequately. All members of the school staff were available to secure any information desired by the committee.

The committee went to work in earnest to study the school and its program. They met with the school staff and supervisors for an over-all picture of the program of the school and the type of pupils served. Each committee member spent a minimum of two hours a week visiting in the school. They sent hundreds of letters to business and industrial leaders throughout the nation requesting views on the need for and the operation of a technical school. The committee visited other cities to examine their trade and vocational programs. They held numerous conferences with professional educators.

Submits Recommendations

Finally, a 35-page report was submitted to the school board supplemented by an oral report on the committee's findings and recommendations. The summary of this report stated:

It is the unanimous opinion of this committee that the Little Rock Technical High School is a very necessary and worthwhile asset to this community and the curriculum offerings should be strengthened and expanded.

The committee feels that advisory craft committees, composed of employers and employees from each trade taught, should be utilized for specific technical advice on equipment and industrial practices in the various trade courses operated in the school.

It is our opinion that the Technical High School should anticipate future industrial needs and be far better equipped for the training of students for these future needs. It was found that much of the equipment is inadequate, obsolete, and unusable in the auto mechanics and

radio departments. The machine shop appears to be the best equipped and would be satisfactory with a few modifications. Modernized equipment would make possible a more worthwhile and practical training program.

The committee feels that a constant public information program for Technical High School is essential. It was found that few citizens know of the purpose or objectives of the school. Such a program should emphasize the dignity and importance of trade and technical occupations in a mechanized world.

We recommend that the persons responsible for the direction of vocational training and the principal of the school be instructed to visit and study the operation of outstanding technical schools in the

the board and by the community. The president of the board, who at one time had felt that the technical school should be abolished, stated that the report was the most valuable one ever submitted. The school board immediately took these steps to carry out the recommendations:

- An advisory committee of six members for each craft taught was appointed and is now functioning.
- The principal of the school and the assistant superintendent in charge of vocational education visited similar schools in various sections of the country.
- A list of equipment needed to modernize the shops was prepared and is being purchased over a three-year period. Most of it was purchased the first year.
- An option is being taken on a site for the eventual relocation of the school.
- A bulletin on the work of the school was published and distributed to all graduates of junior high schools. It outlines the courses offered, and quotes letters and comments of Little Rock's business and industrial leaders who tell why they believe such vocational-technical training is needed.
- The principal of the school visited all junior high schools to explain the work of Technical High School to ninth graders.
- A feature story on the work of Technical High School appeared in the magazine section of a local newspaper.
- Some revisions have been made in the curriculum to help the school meet the needs of the pupils. The courses offered include machine shop practices, automotive mechanics and radio and television repair. Each pupil devotes three hours a day to practical work in his chosen vocational trade subject. The remainder of the day is spent in classes in related theory, related mathematics, mechanical drawing, English, history or social studies.
- The interest of community leaders in this school is very encouraging. Committee members have expressed their satisfaction at having been able to serve the school system. Every member has offered constructive criticism, and none has tried to impose on the professional job of operating the school. This system has, indeed, proved extremely successful.

NEXT MONTH

The March issue will carry a 24-page feature on the winning entries in THE SCHOOL EXECUTIVE's Second Annual Competition for Better School Design.

United States so that the best practices may be inaugurated in the operation of Technical High School.

The committee recommends that, based on the opinions of business and industrial leaders contacted, this school should be made co-educational to provide vocational opportunities not now available to girls in this area.

We recommend that the site of the school be relocated closer to the business and industrial center of the city in accordance with the Peabody Survey.

This committee has concerned itself primarily with the question of whether or not such an institution as the Little Rock Technical High School is needed in this community; and it has not made any concentrated study as to the administration, staff, or quality of instruction other than to observe that the school is being operated under a tremendous physical handicap because of the inadequate equipment. The committee feels that the staff has done a commendable job of training students in technical crafts with the facilities available.

This report was well received by

Author Hazel W. Howell is shown as she appeared on a recent "Report to Parents" TV show in Newark. ➤

Through TV, Schools Are . . .

Bearding the Parent in His Den

AN OLD RECIPE for rabbit stew begins, "first catch the rabbit." In large measure, that's the initial problem facing a school system that wants to give parents a better understanding of the schools their children attend . . . first catch the attention of the parent.

A growing number of school systems in the nation that feel they have gotten over that initial hurdle by putting what they have to say on television, and prominent among them is that of Newark, New Jersey.

For almost two years now the Newark Board of Education and local television station WATV have cooperated in producing a series of weekly programs called "Report to Parents," designed to give Newark parents the opportunity to see classroom situations in action.

A fairly typical example of the type of subject covered is a recent program entitled, "Who Picks Newark's Textbooks?" Aside from its obvious values of acquainting parents with the type of texts their children use and, coincidentally, the changes in subject matter that have forced text changes, a very definite value of the program was the fact that it surely allayed any fears, conscious or subconscious, that viewers may have had about the schools' using "subversive" texts. The program's underlining of the meticulous and democratic way texts are decided upon took care of that.

Perhaps a detailed report of this single program will serve to indicate the way in which the series is set up and the sort of job it strives to do.

The textbook program presented a panel of Newark principals and teachers who indicated that ultimately the citizenry is responsible for textbook selection but that authority is

delegated through the board of education to evaluation committees.

Moderator of the television program was Mr. Thomas F. McHugh, Assistant Superintendent in charge of Elementary Education. He emphasized the importance of wise selection of instructional materials and outlined the administrative aspects of textbook budgets, expenditures, curricular correlation, and inventories. Two textbook evaluation committee chairmen and one committee member discussed the problems of discrimination in their respective fields. Mrs. Gertrude Morton, a vice-principal and a member of the Arithmetic Committee, showed how a nineteenth century textbook and the type of text used in the first quarter of the twentieth century by many present-day parents differ from the meaningful, socially significant arithmetic in use in schools today. She showed how visual and manual devices supplement the texts and displayed various charts and tools for giving the child the "feel" of arithmetic. The value of each of these was demonstrated so that parents would understand the enrichment of basic textbooks.

Visual Aids Shown

Mr. Edward Knopf, elementary school principal, reported that abundant instructional materials are needed for social studies classes. He explained what social studies means, and outlined a general program, showing geography is being emphasized in one semester and history in another, how they are fused, what the outcomes are. He showed the correlation of textbooks and graphic materials by displaying globes, maps, and charts. He then demonstrated how his committee analyzed various maps to

Mrs. Hazel W. Howell is Textbook Coordinator for the Department of Libraries, Visual Aids and Radio of the Newark, New Jersey, Board of Education.

determine which particular map best served the needs of Newark children.

Dr. Abraham Weckstein, chairman of the science department in a Newark high school, told how the secondary science committee functions, emphasizing the background work of the committee. He showed how inventories of books held in the schools were compiled.

Then Dr. Weckstein explained textbook evaluations made according to committee criteria, and discussed the problem of dropping texts from the list. He projected slides and filmstrips used in conjunction with the Newark science program for secondary schools to show how much enlarged is the present concept of instructional materials.

Mrs. Hazel W. Howell, Textbook Coordinator from the Department of Libraries, Visual Aids and Radio, summarized the discussion. She went over the three reports to show how carefully evaluation is done, how seriously recommendations are made, and how the program of textbook evaluation enriches the experiences of Newark pupils.

Response from viewers to the program on textbook evaluation was gratifying, and indicated that parents are becoming conscious of the present objectives of the educational program. The new medium is largely responsible, it is felt, for it reaches parents graphically, and directly, and their reactions attest to a successful venture.



Graphic Arts - a Factor in General

GRAPHIC ARTS, a phase of industrial arts, is an area of instruction which affords many opportunities to integrate various subjects in the secondary school curriculum.

The terms "graphic arts" and "printing" are frequently used interchangeably; however, the latter term does not adequately describe the various activities which should be included in an industrial arts course that will contribute a maximum to the accepted aims of general education. Graphic arts includes all methods of reproduction and allied industries, while "printing" has a connotation of limiting the field to typesetting and making an impression on paper.

There is general agreement that industrial arts should contribute to the goals of general education, and if this is accepted, it is logical to assume that all phases of industrial arts and particularly graphic arts should be more general in content, with less emphasis on developing a high degree of skill in one or two areas, and with more emphasis on integrating the various subject areas in the school curriculum. This makes it possible to provide experiences which are practical and will show the relationship of one subject to another. It makes the educational process meaningful. Further, a course in graphic arts should include activities which will illustrate the various forms of reproduction as well as materials, machines and processes common to the graphic arts industry.

Creative Application

Not only do courses in the graphic arts laboratory contribute to the aims of education, but they also increase

the holding power of our schools by making academic subjects interesting through their application to creative projects. This is important since recent surveys report that in many schools as high as 65 percent of the students entering high schools drop out before graduation.

Typical activities which may be used in a graphic arts course have been selected to point out the many possibilities for contributing to, enriching and integrating the secondary school curriculum. The student completing a course in general graphic arts would be familiar with the various printing processes which play such an important part in our day-to-day activities. It should include relief printing (letterpress) ; Intaglio (cellophane engraving) ; planographic (photolithography) ; stencil (mimeograph, silk screen) ; and the duplicating processes which depend upon chemical reaction such as ditto and blueprinting.

Type Composition

To change measurements in inches to the printers system of measurement requires the application of arithmetic. In setting type, emphasis is placed upon correct spelling, word division, punctuation, uniform style, and paragraphing—thereby correct English takes on new importance to the student. Selection of type, borders, rules and ornaments as well as proper spacing and margins help to develop an appreciation for beauty—design applied. Related information on the historical development of type design and its influence on our present day society—applied social studies. In this area there are many opportunities for

D. E. CARLSEN

Assistant Professor of Industrial Arts
University of California
Santa Barbara College

integrating this work with English, mathematics, art, and social science classes. The work of the graphic arts student requires the use of the mind as well as the hand.

Block Cutting

An interesting cooperative project which will integrate the work of the English, art and printing departments might be a calendar. The English department would select a theme and a short quotation appropriate to each month of the year. The art department illustrates the theme, selects paper, chooses color and cuts wood or linoleum blocks for the illustrations. The graphic arts department would select and set the type, mix the ink, print and bind the calendar. A project of this kind offers many opportunities to develop leadership and good judgment, and stimulate analytical and creative thinking.

Rubber Stamps

Students like an activity which provides some tangible results. The making of a rubber stamp requires preparation of copy, typesetting, lock-up, moulding, vulcanizing and mounting. This opens the avenues of occupational exploration. The finished product is a useful article to the student or his parents. This activity is not expensive to install or maintain.

Cellophane Engraving

Paper money and postage stamps are printed by the Intaglio printing

Education

process. One of the objectives of industrial arts programs is acquainting the student with industrial processes. To make a celluloid engraving of a book plate, for example, illustrates this process very well. Further, this activity requires the application of the principles of art and frequently the mixing of colors to obtain effects appropriate to the subject.

Silk Screen Printing

One of the most recent methods of reproduction, which is today growing by leaps and bounds, is silk screen printing. This process involves drawing or selecting a design to be printed, making a stencil by any one of several methods, mixing of paints and printing. Projects such as place mats, napkins, and posters are practical and useful. What is involved? Again, art, manual dexterity, knowledge of color and related science.

Mimeograph

Most of us realize the advantage in knowing how to operate mimeograph duplicating machines and to prepare stencils for this commonplace machine. A poem or a theme by the student composed in an English class would make a suitable project here. Each student might prepare a paper on a different subject and print enough copies for each member of the class. After the students had completed their assignment they might bind the copies together, which correlates this activity with the next area I would recommend—bookbinding.

Bookbinding

One of the oldest arts in the field of graphic arts, bookbinding is one of



Educational processes become meaningful when students participate in creative projects which require application of learning acquired in the general curriculum.

the five leading industries in the United States. Mass production techniques have largely replaced the hand work of the past, however, many localities still have a hand bookbinder. Their services are sought for rebinding valuable volumes as well as small edition binding where mass production techniques are not practical. In this activity the student learns how to sew a book, make a casing, and decorate the end sheets and the cover. Because of its versatility, the silk screen printing process is frequently used for cover embellishment.

Marbling may be worked into bookbinding projects. Most people are familiar with the marble appearance on book edges as well as the marble-decorated end sheets. It has been said that the Dutch developed this process to decorate the paper

used to wrap toys which were sent to England for sale; English bookbinders would then salvage this paper and use it as a decorative end sheet in their bookbinding. Most graphic arts teachers have printers ink, turpentine and a pan available which is the only equipment needed for marbling on a limited scale.

Hot stamping, formerly called gold-stamping, includes various stamping foils, one of which is genuine gold leaf. This is still recommended as the medium for stamping leather, due to a chemical action of leather upon imitation foils—another opportunity for applied related information in science.

Papermaking

Paper may be made on a small scale in the graphic arts class with

inexpensive equipment. How could anyone better understand how paper is made than by making a sheet himself? At this point, a showing of one of the many excellent films on commercial paper manufacture might be appropriate to supplement classroom activity. Integration with the fields of biological, chemical and physical science is most apropos where the law of association can make a reality of the laws of science.

Ditto Duplicating

Spirit and gelatin duplicating processes are simple and commonplace in most offices. A short unit on these duplicating processes will better prepare our graduates to meet later vocational situations.

Planographic Printing

To be complete, a graphic arts class should give the student first-hand experience with the lithographic process. Principles of lithography, discovered 155 years ago, are the basis of our present-day photolithographic printing process which is becoming increasingly important in the printing industry.

Perhaps few schools could afford a small commercial press; however, by obtaining an inexpensive lithograph plate the process can be illustrated without elaborate equipment. A field trip to a lithographic printing plant or a motion picture on this process would be appropriate when this unit is introduced.

Hay Printing

Experiments in printing with various materials provided by nature such as hay, leaves, etc., have proved successful in the industrial arts department at the University of California, Santa Barbara College. A rather simple process, using standard equipment found in most graphic arts departments, makes it possible to print various designs to decorate printed pieces. This activity may be integrated with a class in nature study. Commercial application of this process would, of course, be very limited—costs are high, as only short runs are possible.

Photography

A pin-hole camera may be constructed in a graphic arts class to teach the basic principles of photography. Negatives may be developed

and printed as a part of the class activity. Again, mathematics and chemistry are given practical application, and the physical laws of illumination, image and focus are clearly demonstrated.

Blueprinting

Most industrial arts programs include drawing courses in which blueprints are made. If it is not covered in drawing classes, it may well become a unit in the graphic arts class. Great change has taken place in the last decade in this means of reproduction; the processes have been shortened and improved.

Production Versus Instruction

Two obstacles for realizing a graphic arts program of this type are evident. The first is a matter of printing production. Too many superintendents, supervisors and principals who now have graphic arts facilities have exploited this activity to get printing done for the school at what may appear to be a saving. Most printing is a made-to-order item and therefore labor and overhead is a sizeable portion of the total cost. If only the dollar cost is taken into consideration, the saving is substantial—but no printing teacher is capable of printing the school paper, the PTA programs and tickets, the absence slips, the report cards, and the many other items frequently demanded, and at the same time carrying on proper instruction in several different activities.

Administrators might ask themselves: Do we have graphic arts facilities to teach students, or do we have these facilities to turn out the school printing? If the answer is the former, drop the latter; drop the production—all of it—while the class is in operation.

These activities are recommended for industrial arts classes, not vocational classes where the major emphasis is placed upon a single objective, that of developing skill.

The second obstacle in initiating an integrated program in graphic arts is the finding of trained teachers qualified to instruct a class of this kind. However, this obstacle is becoming less serious. Several leading university and college departments of industrial arts have recognized the need for this type of training, and it is rapidly finding its proper place on the curriculum.

New Device

DRIVER education is coming of age. The New York City Board of Education and Board of Superintendents are alert, as are other educational agencies, to the problem of safety on the highways and the need for instructing youth in correct driving attitudes and habits. Currently, over 75 of our 84 high schools are offering a classroom course in driver education. Two schools provide actual on-the-road practice driving.

New Apparatus

To fill the demand in this pioneer area, instructional technics, visual aids and special testing equipment have been developed. One of the newest types of apparatus is the Roadometer. This driver performance equipment is designed and manufactured by the Automagraph Company of New York and sponsored by the Aetna Casualty and Surety Company of Hartford, Connecticut, as part of their campaign for greater safety on the highway.

Many difficulties are involved in offering a comprehensive program, including behind-the-wheel instruction, to all pupils in the schools of congested New York City. Devices which simulate actual driving situations are needed to help solve this problem. For this reason, the Aetna Roadometer held promise as a tool which had instructional and evaluative uses in a driver education program.

Stationary Auto

The Aetna Roadometer is in effect a stationary automobile made up of the usual automobile controls together with a self-contained picture screen, a continuous 16 mm. film projector with a synchronized slide film projector. Mechanisms for immediate recording of the nine driving incidents depicted on the screen are provided.

for Driver Education

- Stationary auto simulates actual driving situations and records student performances.

J. WAYNE WRIGHTSTONE, GEORGE FORLANO
and RICHARD J. O'CONNOR
Board of Education, City of New York

In order to test the contributions of the Roadometer, a study of its instructional effectiveness was conducted. A comparative study of Roadometer performance was made of equated eighth, seventh and sixth term students enrolled in the automechanics classes at Brooklyn High School of Automotive Trades. Four performance tests for each group were made and evaluated. By the time the fourth trial was reached, the average total scores on the Roadometer indicated that the three term groups had reached approximately the same level of functioning. In practically all instances, the three term groups improved their average scores from the first through the fourth trials. The findings point to the conclusion that significant growth in the specific driving skills tested takes place over a four-trial practice period by both previously trained and untrained student groups.

A survey of subtest data showed areas where the untrained groups needed most instruction, as well as the strengths and weaknesses of the trained eighth term group. In addition, the data revealed specific areas where the untrained groups could quickly reach the performance level of the trained groups. In other words, the Roadometer could be used both for diagnosis and for the improvement of learning.

Student Reaction

At the end of the second trial on the Roadometer, each student completed a questionnaire designed to survey various aspects of the student's experience. An analysis of their response indicates that the students reveal positive, self-critical attitudes as a result of their experience with the Roadometer. A majority of the students stated that they learned,

among other things, the need to "keep alert" at all times when driving a car. About 93 percent of the students thought that the film depicted real-life traffic situations, 92 percent felt they were in a moving vehicle and about 87 percent felt that the Roadometer would speed up learning to drive a car safely.

The results of this exploratory study indicate that the Aetna Roadometer is related to formal course training in behind-the-wheel instruction and somewhat associated with actual driving experience of the student groups tested. The current Roadometer Test indicates that in its present form it is adequate for group measurement purposes provided that the testing period is extended to 8 or 10 minutes.

Results of Practice

Student performance on the Roadometer seemed to show growth from trial to trial. A series of brief self-

The Aetna Roadometer immediately records student response to the driving situation projected on its motion picture screen.

guided practice periods on the part of untrained and no-driving-experience students eventually resulted in achievement practically equal to that of students with formal training and some driving experience.

The Roadometer has definite appeal to the student. The students were given a life-like orientation to driving on the road and an apperceptive background for a better understanding of the verbal content of their textbooks in driver education.

Ways to Improve Tests

In its present stage of development, the Roadometer can test or instruct only one student at a time. After a thorough examination of the electronic and other mechanical devices included in the machine, it appears to be a rather simple operation to convert the present apparatus so as to provide instructional and testing equipment for group training of 25 or more pupils at one time. This conversion will include the development of a series of instructional and testing films covering various driving situations together with a multiple score sheet necessary to grade all pupils at the same time. Thus the teacher has the result of pupil performance immediately and a basis for group discussion and remedial measures. The Roadometer has possibilities of fitting into a program where group instruction is required and where actual road instruction is prohibitive because of the lack of proper road training areas and the high cost of behind-the-wheel instruction.





**The College Club helps
Port Huron High
School seniors select...**

In Port Huron High

Club Helps Students Choose a College

**by MORTON J. TOMLINSON
and TED B. SOUTHERLAND**

“Which is the best college for me?" "Is it wise to send our child to a college because his friends are attending, or because we are graduates?"

"How can I help students select the college most suited to each one's aptitudes, interests, personality and abilities?" These questions beset the student and his parents and school counselors when they must select a college for him to attend.

Many attempts have been made to assist the student in choosing a college. Schools where 60 percent of the student body go on to college often employ a college counselor who visits campuses to better acquaint students with the standards, requirements and curriculum of colleges under consideration. He helps place the graduates in schools where they will best succeed.

Other schools with smaller percentages of college preparatory students emphasize the College Day. It is

customary to devote that designated day to entertaining representatives from several colleges who talk with all interested students and distribute literature concerning their respective educational institutions. The administration at Port Huron (Michigan) High School had set aside such College Days for several years but was convinced that the practice did not give the students the best and truest picture, so it was discontinued.

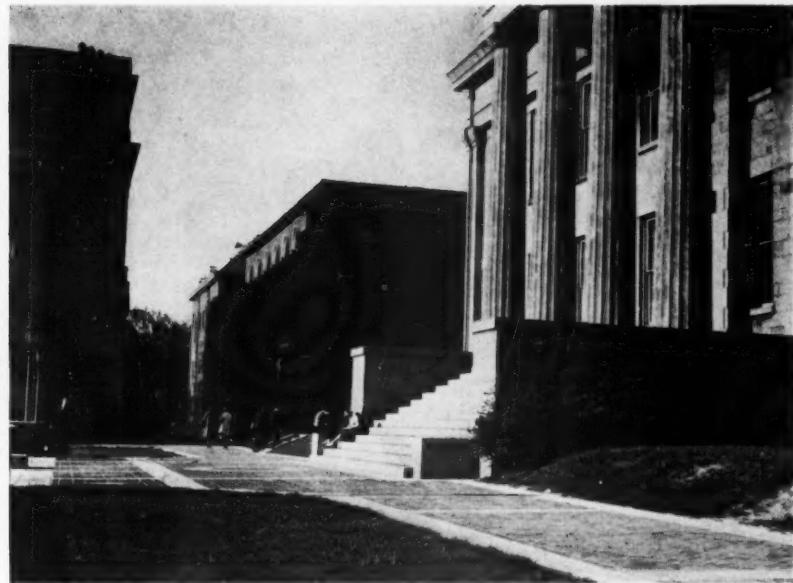
Students Visit Colleges

We now feel we have solved the problem of acquainting high school pupils with the various Michigan colleges. We take our students to the college instead of attempting to bring the college to the students, and the results have been most encouraging.

Four years ago Port Huron High School students, under the guidance of Ted B. Southerland, Boys' Counselor, organized a College Club. It collects no dues, meets twice a month,

Mr. Tomlinson is Principal of Port Huron High School, Michigan. Mr. Southerland, Boys' Counselor at Port Huron High, recently spent two years as Dean of Men at Hillsdale College, Hillsdale, Michigan.

... the college best for them by visits to various Michigan campuses.



elects a president, vice-president, secretary and treasurer. One of the meetings is a business meeting held after school. The second meeting is either a visit to a campus, or an evening meeting at the school listening to a representative from a college selected by the students. Parents and students attending this meeting later enjoy refreshments at a social hour.

Membership Requirements

The College Club has three membership requirements: the student must be enrolled in a college preparatory course, he must maintain at least a "C" average and he must be in the eleventh or twelfth grade. This year fifty-five students out of a student body of 1,500 are members.

Arrangements for visits to campuses are made well in advance by the club secretary. The Transportation Committee cares for all traveling details. The trip is by auto, usually furnished and driven by parents, the students paying the cost of transportation.

After arriving on campus we are conducted on a tour with stop-offs at all points of interest. The group is then divided into small sections, and each section attends a class in one of the basic freshman courses just as they would do if they were enrolled. Later lunch or dinner is served in a

dining hall or dormitory. The students are guests of the college and often have been invited to eat in sorority or fraternity houses by request of the college administration.

Three or four colleges are visited each semester. Two such visitations can be made in one day if the schools are small and not too many miles apart. However, only one large school is visited during a day. Before the trip home the group assembles and an official of the college explains the program and answers any questions of the students. Several colleges invited us to be guest of their students for a weekend, and this we did for the first time last spring. It gives the students an excellent idea of week-end activities at college and of the dormitory rules. Meeting, eating and rooming with college students and learning why they chose to enroll in their schools have proved to be valuable experiences.

Expenses Studied

During the course of the year considerable study is made of the costs involved in attending college, scholarships and part time work opportunities. At each campus visited an official speaks with students of the College Club about the specific financial help available there in the form of scholarships, college jobs or community jobs.

Many times this type of information has helped a student make the right selection.

The only purely social event of the Club is the annual spring dance for former students who are home on vacation from college. It is gratifying to hear each tell of his awareness that he is in the "only" school and "wouldn't want to attend anywhere else."

We judge that our College Club is a success because we have one or more students in attendance at every college we have visited. Prior to this, our students would flock to the University of Michigan or to Michigan State without first investigating other colleges.

Parents are enthusiastic about the Club. One mother remarked, "It is so helpful to have our son take these trips and come home with definite ideas as to which college he prefers and why. It gives us more assurance that he will be happy and well-adjusted at college".

We at Port Huron High School are convinced that it is a major responsibility of the secondary school to help place graduates in schools where they and their parents can realize a good return on their investments of time and money. Our College Club has proved to be instrumental in attaining this goal.



World history classes, under the special program, place emphasis upon the world of today as it relates to local, national and international problems.

half the pupils in this country
never finish high school.
this is the story of one school
system's attempt to solve
the drop-out problem.

What to Do About High School Drop Outs?

ONLY 50 percent of the pupils in the United States who have completed the fifth grade graduate from high school. In an attempt to meet this challenge confronting secondary school education, the administration of the Kansas City Schools last fall initiated a program on the senior high school level designed to provide a new learning experience for secondary school pupils. As a result, many youngsters who had become discouraged and were considering dropping out of school are responding enthusiastically to the program and are demonstrating their ability to profit from high school training.

Many of us have asked the question, "Why don't more young people complete their high school education?" Numerous explanations have been given, but I believe it was best summarized by Mr. J. L. Laughlin, Principal of Northeast High School,

When he said, "They are the pupils who, for some reason, won't or can't get a high school education under our present educational program." It was of these pupils that we were thinking when we began planning our program.

Studies show that the highest student-mortality rate is in the early part of the secondary school. By this time many have reached the age when they are no longer compelled to attend. A report to the Work Conference on Life Adjustment Education in 1950 showed that over 37 per cent of the pupils who drop out of school between the seventh and twelfth grades are sophomores. We therefore planned our program for that class. The group that was selected last fall consisted of 25 boys and 24 girls.

Selecting the Pupils

The selection of these pupils, made by the counselors of the Northeast Senior and Junior High Schools, was

E. OREN HAMMOND
Instructor, Northeast High School
Kansas City, Missouri

based upon a number of criteria. From the cumulative record, the standardized test results gave a good picture of each pupil's general ability and academic skills. In many cases there was a physical disability or social maladjustment that could be credited with causing some retardation. Teachers' records and citizenship ratings gave some indication of the problem involved. In almost every case there was a record of unsatisfactory progress or failure in one or more fields of the pupil's previous school work. This was evidenced by the fact that these forty-nine pupils accumulated a high total of inferior and failing grades last year in the junior high school.

Since all of these pupils measured

below average in their reading ability, it was necessary to develop a reading curriculum. A special committee, under the direction of the Assistant Superintendent in Charge of Instruction, selected a series of texts and related material on a level comparable to the ability of these pupils. This material was carefully selected to prevent any duplication of material from previous grades.

Before the opening of school, appointments were scheduled with the pupils and their parents to discuss the plans of the program. It was explained that we hoped to overcome some of the past scholastic difficulties by combining sophomore English and world history. It was pointed out that these combined classes, plus a 25-minute study period, would provide an opportunity for more personal assistance and supervision. This would aid the pupil in making the transition from junior to senior high school, and would offer a better opportunity for individual development. Such an arrangement would also require a minimum of homework. The plan was to organize a practical functional English course, placing emphasis upon the subject matter which would be most useful to the student. In world history, we would attempt to develop a world consciousness and place emphasis upon the world of today as it relates to our local, national and international problems.

Field Trips Through City

The regular classroom work is supplemented by field trips to various industries and places of interest in the city. On these trips, as well as in the regular classroom work, we stress good school and community citizenship, and the importance of the individual in today's democratic society. These trips are taken about every ten days and are closely correlated with our classroom subject matter in English and world history. They have also provided an abundance of occupational information and have added much to the interest of our classroom material.

We have used our school library to supplement our regular instructional material. Through the cooperation of the librarian, an abundance of material has been made available including subject matter material as well as fiction and non-fiction reading. Magazines of interest are also pro-

vided for free periods when assignments are completed. This gives the pupil an opportunity to explore the field of his major interest, and to develop better study and reading habits.

We have made extensive use of audio-visual aids in this program. Selected films give excellent illustrations of the life and problems of the part of the world we study.

Correspondence with individuals and classes in other countries has stimulated exceptional interest in both world history and English. We have been fortunate to have several classroom guests who have traveled in various parts of the world. Discussions with these visitors have added much to our regular class assignments.

Evaluating the Program

At the close of the first semester we have found sufficient evidence to make some evaluation of the program. Of the original 25 boys, 24 are still enrolled. Their average age is sixteen years and nine months; only five were under the compulsory school attendance age of sixteen. The average attendance for this group for the first semester was 96.3 percent—over three percent better than the average attendance for the entire student body. All but one of these boys (he nearing military service eligibility) stated that they planned to be in high school next year.

Twenty-two of the original twenty-four girls are still enrolled. One girl was forced to discontinue school because of her health; the other girl has married. The average age of this group is sixteen years and five months, and their average attendance for the first semester was 93.2 percent. Each girl indicated that she plans to attend school next year.

A study of some occupations and their requirements has also been a part of our program for these students. This study has correlated well with the field trips we have taken and has given the pupils a chance to explore their occupational plans and the opportunities available. Some measures of the occupational interests of the pupils have been taken. The results of these interest tests and our other objective measurements give a good picture of each pupil. A recent survey shows that their plans include occupations and careers close-

ly related to their expressed interests, and within the range of their abilities. Approximately one-third of the boys have indicated a preference for part-time work with their school program next year. Most of the girls prefer a full-time program in school. Plans are being made to coordinate a school program with some employment in the field of the interest and ability of the students.

Pupils' Grades Improve

We realize that marks are not the only measure of school accomplishment. However, the record for these pupils at the end of the first semester gives some indication of their progress. A total of 223 marks were recorded for these 46 pupils. They were distributed as follows: A-10, B-48, C-92, D-50, and F-23. It is interesting to note that there were 73 D and F marks recorded; last year these same pupils averaged 100 D and F marks for each semester.

The excellent attendance record of these pupils and their expressed plans to continue in school are certainly indications that they are receiving satisfaction from their school experiences. They are giving evidence of gaining self-confidence and improving in their ability to meet educational standards. This is reflected in the improvement of their marks, their attitude toward school, and their evaluation of a high school education. It is also reflected in the serious practical consideration they are giving to their occupational future. We believe these results indicate that this program is attracting and stimulating many of those students who would otherwise lose interest in high school.

In a recent discussion of the program, Principal Laughlin made the following comment: "I think the most significant result of the experiment at the present time is the fine attitude developed in the pupils. Last year, most of them disliked school and many were discipline problems. This year, they are friendly and enjoy school. Furthermore, we have had practically no discipline problems within the entire group. If we can take educationally maladjusted pupils and help them have a distinct place in the school and give them a desire to get more education, and if we can help them develop higher citizenship standards, then we have accomplished a great deal."

Statistics Back Core Program Supporters

SKILLS MEASURED	Seventh Grade	Ninth Grade	Gain
Reading, Core	7.2	9.9	2.7
Reading, Regular	7.3	9.6	2.3
Work-Study, Core	7.1	9.8	2.7
Work-Study, Regular	6.7	9.7	3.0
Language, Core	7.4	9.7	2.3
Language, Regular	7.3	9.2	1.9
Arithmetic, Core	8.1	9.5	1.4
Arithmetic, Regular	8.6	9.6	1.0
Total Mean, Core	7.2	9.72	2.52
Total Mean, Regular	7.1	9.55	2.45

General information on study: Of the students covered in this study, 235 with an I.Q. range of 81-131 and an average I.Q. of 103.4 followed the Core Program. The Regular program was followed by 73 students with an I.Q. range of 81-132 and an average I.Q. of 102.6. The figures express mean grade equivalents in years and months. Children were tested at the beginning of the seventh grade in all skills except Arithmetic, which was not tested until the beginning of the eighth grade.

Here's Proof that

Core Program Students Learn Basic Skills

by ARTHUR C. KELLEY
and ROBERT E. BEATTY

THE combination of a professionally progressive superintendent of schools and a forward-thinking board of education has enabled Penn Junior High School to organize the seventh and eighth grade curriculum as a program of general education. A preliminary study had revealed weaknesses in the traditionally departmentalized junior high school and caused serious consideration of a program closer to the needs and interests of early adolescent youth in Penn Township.

Weaknesses Eliminated

The weaknesses of the junior high curriculum were identified as a general disregard of known principles in the psychology of learning; a lack of articulation among grades; undue emphasis on pre-planned organization of subjects and departments; slavish borrowing of the philosophy and

method of the senior high school and college; too much attention given to the "what" of instruction and not enough to the "how"; overemphasis on the importance of teachers as subject "experts" rather than as child "experts"; and excessive departmentalization.

To eliminate these weaknesses, instruction at Penn Junior High School is based upon broad units of work which are carried on under the direction of a core teacher in longer blocks of time than the traditional period. Areas usually labelled English, social studies, reading, writing, and spelling, along with the unifying core

theme, are under the supervision of one staff member, the core teacher, who has one group in the morning and one in the afternoon. The rest of the student's day is given over to resource areas in mathematics and science, and the special areas of fine arts, industrial arts and physical education, all with separate teachers.

Core Theme Central

The seventh grade unifying core theme is a consideration of community life beginning with the local community, Penn Township. The eighth grade core theme centers around the building of a model community and developing skills, understandings, and knowledges. In both grades, the core theme is the unifying and motivating agency on which instruction centers.

After three years of this program, the values derived have far exceeded early expectations. Pupil morale is

Arthur C. Kelley is Principal of Penn Junior High School, Allegheny County, Pittsburgh 35, Pennsylvania. Co-author Robert E. Beatty is Director of Guidance, Penn Township Schools.

excellent; students on the whole like to come to school, and attendance and discipline problems have been reduced considerably. There is considerable evidence of better pupil-teacher relationships. Every child can achieve some status and success under such a program, and greater cognizance is taken of the capabilities of the slow learner and the retarded pupil, while the mentally above-average student is challenged to work at his pace.

This program demands regular weekly teachers' meetings to discuss pupil adjustment problems and teaching techniques. Our teachers actually work on curriculum organization. Teaching emphasis has shifted from the acquisition of facts to the establishment of problem situations, teacher-pupil planning, utilization of community resources, independence of action on the part of pupils in cooperative committee work, and practice in citizenship. The core teacher knows the pupil better, and greater attention to pupil adjustment problems is given through classroom guidance. Students are stimulated to make wise use of the library, visual aids, field trips and special departments.

What about the basic skills? This

question frequently raises doubts in the minds of parents and professional workers when a change is made in the basic curriculum. We determined to use the Iowa Every-Pupil Achievement Tests of Basic Skills to evaluate the program. The tests were given over a three-year period to determine the extent of growth in the various skills measured by the sub-tests. Similar tests were given to a semi-control group following a traditionally departmentalized, subject-centered program. Both groups were carefully weighted as to mental ability.

The results of the first tests indicate no significant difference between the two groups in the skills measured, showing that both groups began with equal competencies. Competency in the basic skills, then, did not suffer under the core program, as measured by the Iowa tests, but actually ex-

ceeded that of the control group in reading and language skills, and in total net gain. The true gains probably would have been higher except that many students reached the ceilings of the tests, eleventh grade plus. Their contribution to the final net average could have gone much higher. As a result, the net averages are somewhat lower than if the total achievement of the better students could have been as completely measured as that of the poorer students.

On the basis of the results obtained, it is proved that the basic skills can be adequately taught and measured in a core program. Considerable time, energy, and money have gone to prove this fact to patrons of the Penn Township Schools and to the teaching profession. We believe that this program in the junior high school is a big step in curriculum progress.

Here's Ammunition to Use Against Doubters of Core Program Worth



Erection of a model development, plus research and committee work, go on simultaneously in this core class.



A laborer, a clerk, an assistant librarian and a medical assistant find creative satisfaction working with silkscreen.

An Art Program for the Community

THE resources of art in a community depend upon the creative experiences stored up in its art traditions, upon the knowledge and talent of its living artists, and most of all upon opportunities for the people as a whole to participate in the experience of art.

An art program, like the creative activity of the artist, must find a medium and move in an environment. In this case, medium and environment are to be found in the people themselves, their actions, habits, thoughts and feelings.

Let us look at an art program in which there is a degree of community

participation. The day and evening art courses open to the community at Phoenix College make such participation possible. Ranging from art and design to advertising art, the courses offer a variety of experiences vital to the individual's exploration and experimentation in various media. They increase knowledge of art, skills and creative experience in significant activities, and encourage the realization that art has its roots in everyday experience.

Aimed at Self Expression

Art classes are taught with full recognition that all individuals are

JOHN F. RIOS

Department of Art
Phoenix College
Phoenix, Arizona

capable of expression in art. Individuals vary markedly in motivation and capacity, and art is less a body of subject matter than a developmental activity. This art program puts life into the school—life that goes out into the homes and in turn permeates the community.

The Phoenix College art program for the community is a type of edu-

tion that will develop the individual to his fullest capacity for a rich and satisfying life. It brings people closer together in bonds of common understanding and appreciation. It establishes and sustains a cordial and cooperative friendship. Phoenix College art program recognizes the exigencies of daily living and develops the intelligence to meet them. Because art experiences are close to the core of individual and social development and because they pervade all phases of living, we believe that all people should have some knowledge of art.

Sample Art Courses

Design has a very definite place in creative art. Many times adult beginners who may feel inadequate in an art class gain a satisfaction from being able to assemble and perfect a design which requires no natural drawing ability. Most beginners use brilliant colors, startling textures, and unusual shapes. If they are taught balance and harmony, they have all they need in technique to create an original design.

Modeling in clay or plastelina offers the participant a good experience in motor control of the hands while making the medium behave.

Portrait painting is always interesting to beginners and can be rewarding for both the painter and poser.

Landscape painting is a frequent



The author examines the design one of the students is painting on place mats.

choice of art students because there is more freedom of subject matter. The fewer rules set for an adult, the more secure he feels.

Sculpture is popular with adults when the products are functional and practical. When a definite place is designated for the finished product in the home or elsewhere the process is most enjoyable.

Textile painting is of special interest to many an adult. Many home de-

cor articles, such as place mats, table linens and curtains, are produced with great success and fun.

Art problems are ever-present in the home, in personal appearance, in business, in the entire community. Art serves daily problems and brings school and home closer together. The school that minimizes art not only fails in a vital area of education, it also misses a unique opportunity to serve the community.

Photographs by Dr. Abe Margolin



This pediatrician works at her painting even when on call.



An Arizona Indian tries her hand at a portrait in pastels.



When the substitute teacher is acquainted with the school's program, she can step in with a minimum of upset for all.

We Train Our Substitute Teachers

EVERY year thousands of teachers lose time from their work due to illness, illness or death in the family, attendance at professional conferences or visits to other schools. Enter the unsung substitute teacher! Too frequently this means a temporary lag in the educational flow while the substitute acquaints herself with the school's equipment and program of study.

Substitute teachers are necessary, of course. Substitutes are not "baby sitters." They are experienced professionals who can be depended upon when they are called. But *trained* substitutes are required if the educational program is to be carried on with a minimum of upset for all concerned. It was this need for competent substitutes that brought about a training program in the North Haven School System.

Recruiting Substitutes

We were fortunate in having about five dependable substitutes, but with the opening of a new school our potential demand was increased. Individuals interested in substitute teaching were recruited through local newspaper announcements, a local teachers college placement bureau, screening applications for teaching

ROBERT W. MacVITTIE

Principal, Montowese Elementary School
and Co-ordinator of Substitute Teacher Services
North Haven, Connecticut

positions already on file, and contacting former substitutes.

Voluntary Training

Our substitute training program was offered for three days from 10 A.M. to 2:30 P.M. Announcements of the program were sent to all people who were on our list of prospective substitutes. Attendance at the meetings was not compulsory; interest in the program was the main attraction.

The first meeting opened with the registration of the substitutes and distribution of materials which were to be used as a handbook for substi-

tutes. The superintendent presented a background of the community and school system, and one of the principals acquainted the group with our philosophy of education. Question periods following the talks allowed clarification of many details.

Observe Lunch Programs

The director of lunches discussed the lunch program and explained the role of the teacher in regard to school lunch. The group adjourned to one of the schools and observed the lunch and noon hour program in operation.

After lunch, which was served at one of our school cafeterias, teachers

A School System Invites Substitutes

*To Tour Plants, Observe Classes, and
Inspect Audio-Visual Aids Available*

attended lectures and discussions on various subjects intended to bring about a better understanding of our school system, and of how substitutes fit into our educational setting. The teachers were divided into several observation groups, according to grade level choice, interest in subject area, and state certification—elementary or secondary.

On the second morning the substitutes arrived at their assigned schools at 8:30 so that they could observe the opening of school. The groups observed various classes, participated in the lunch program, and noted that slightly different facilities brought about a variance in the school program. The afternoon session was spent familiarizing the substitute teachers with audio-visual aids available in our school system.

Tour of School Plants

The morning of our last day's meeting was spent in guided tours of all four school plants. Every teacher had the opportunity to see what facilities were available in each school. The afternoon session was spent in clarifying questions and evaluating the program. The group ranked program benefits, in order of the value to them as substitutes, as follows: 1) observation of the program in action; 2) discussion of problems related to substitutes; 3) community and school background; 4) tour of school plants and audio-visual aids demonstration.

Future Activities

We feel that it was a valuable program for us as well as the substitute teachers. Not only do we know them personally but we also had an opportunity to help them fit into our system. The substitutes in turn know that we are interested in them; they are actually affiliated with our school system. We do not plan to stop here. Every bulletin issued to our regular staff will be sent to the substitute teachers, and special bulletins for substitutes will be sent out about four times during the year. Invitations to professional meetings will be extended to the substitutes. They are not members of a forgotten group, nor will they forget the help they have received. Can this program with its many concomitant learnings be of value to our school systems? The answer is an obvious "Yes."

This, I Believe

by WALTER D. COCKING

I BELIEVE that educated people are essential for a successful democracy.

I believe that the public schools were organized as America's way of developing educated people.

I believe that good schools are the right of every American.

I believe also that every community has the obligation to provide good schools for its people.

I believe that education is the legal responsibility of the political state, and that it discharges that obligation best by delegating the large share of their operation to local communities.

I believe, however, that the state has the obligation to make sure that a necessary foundation program is found in every community.

I believe that the schools belong to the people, and that they must determine the functions and programs of their schools.

I believe that the people select a school board to carry into action the considered will of the people.

I believe that administrators and staff are employed to operate the program, and to advise the school board and people upon matters for which they have special competence.

I believe that the program and procedures of the school in a dynamic society are never static and must be constantly changing so as to meet changing needs.

BELIEVING these things, I also believe that citizens must come together to study, to consider, and to form judgments regarding the needs and work of the schools.

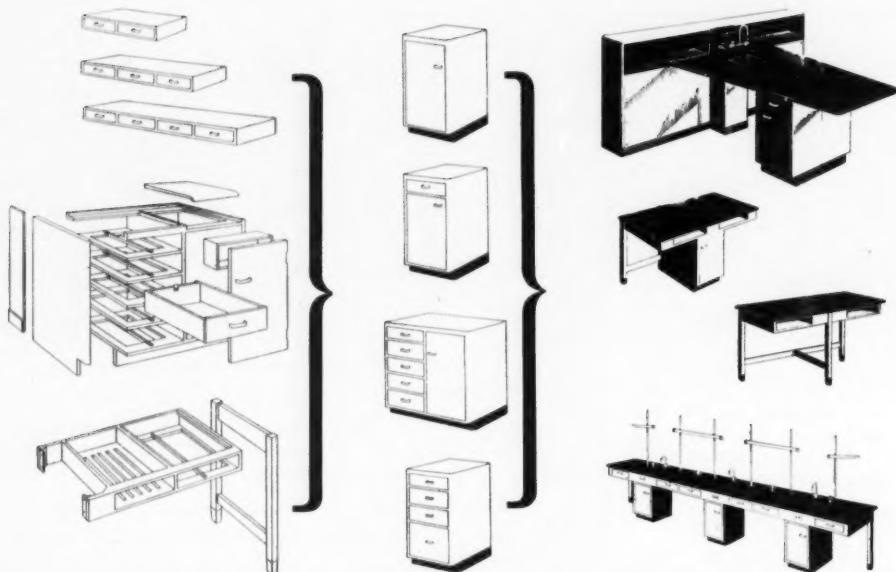
I believe that representative local citizen committees, properly organized and operated, represent one good way through which citizens can formulate their beliefs about schools.

I believe that dynamic leadership is needed to translate community beliefs into intelligent action.

I believe that a state citizens committee can do much to help form such local committees and aid them after they are organized.

Finally, I believe that, to the extent to which ways are found for the people to participate in determining the function and program of their schools, to that extent we shall have good schools which will assist materially in making the American way of life function effectively.

Excerpt from an address delivered before the first annual meeting of the New York State Citizens Committee for the Public Schools.



From standard furniture frames . . . to basic laboratory units . . . to finished laboratory assemblies.

A New Design in Laboratory Furniture

The functional equal of custom-built furniture, these units are reasonably priced and adaptable to the varying requirements of secondary education.

NEW developments in science and education, accelerated by defense requirements, have resulted in an enlarged and more vital role for education in preparing the younger generation for modern living. The importance of science training as a major part of the modern educational program is recognized by all educators.

Physics, chemistry and biology,

once deemed necessary only for college preparatory students, have become such an important part of the web of everyday life that adequate science training is an educational "must" today.

Meeting New Needs

To meet this vital need for more extensive science training and to provide maximum flexibility at minimum cost, secondary school laboratory equipment and facilities are undergoing changes.

In the past, standard laboratory furniture tended to be expensive and inflexible. Varied requirements often necessitated the use of custom-built, costly laboratory furniture. Planning

laboratory furniture for new schools or for conversion programs of older schools posed a difficult problem. Urgently needed—but lacking—was a high-quality, flexible furniture unit which would meet the requirements of secondary school science instruction and which could be produced at a reasonable cost. The ideal type of laboratory furniture should be adaptable to the widely varying needs of schools with differing levels of enrollment. It should be suitable for: (1) the smaller schools with a student enrollment of 500 or less where general science, physics, chemistry and biology are all taught in the same room; (2) for schools with approximately 750 students where general science

This article is based on a report by S. S. Coston, Vice-president of the John E. Sjostrom Company, Designers and Manufacturers, Philadelphia.



Multi-Purpose laboratory unit



Four-student chemistry-physics table

and biology classes are held in one room and chemistry and physics classes in another; and (3) the larger schools with enrollments in excess of 1,000 wherein a separate room is provided for each subject.

Based on Surveys

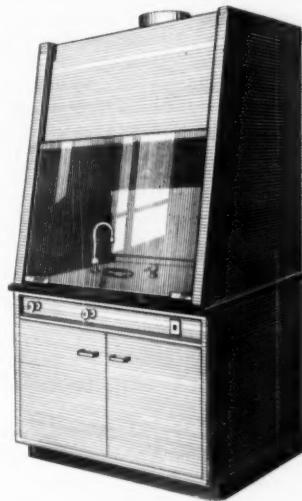
Furniture manufacturers recognized these important factors and initiated action to overcome many of the handicaps inherent in standard laboratory furniture. For example one firm, the John E. Sjöström Company, decided to start from scratch—to eliminate time-honored but outmoded features and to determine basic functional requirements. As a guide in determining school laboratory requirements, continuous surveys of architects, school officials, administrators, science teachers and students were made. The representative sample of opinions and recommendations, when analyzed, provided an excellent picture of what was re-

quired and what was lacking in the furniture then being manufactured. Armed with these facts, the engineers proceeded to design and develop a new, different type of laboratory furniture, incorporating the good features of standard furniture and eliminating others.

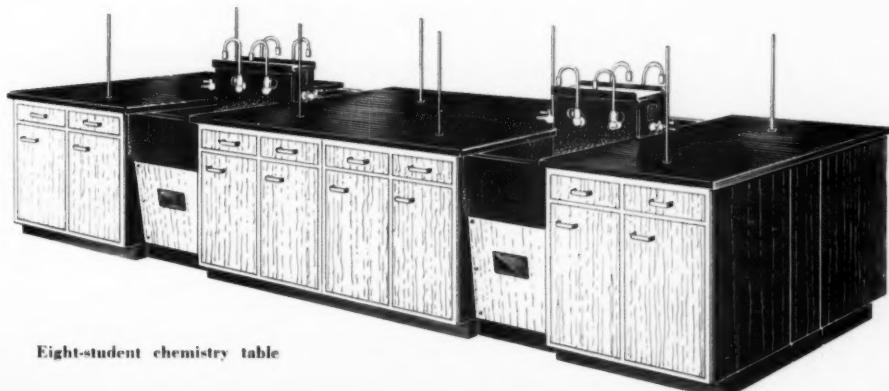
From this basic research and design program stemmed a new concept in laboratory furniture construction which offers three important benefits: it meets the basic requirements of secondary schools with small, medium or large student enrollments; it is constructed of separate units so that it can be assembled to meet current needs and can be rearranged or enlarged when requirements change; and the advantages of custom-built laboratory furniture are offered at standard cost.

Basic Unit Design

Because specially constructed custom assemblies were inflexible and



Fume Hood



Eight-student chemistry table

prohibitive in price, a series of standard furniture frames was first designed. From these frames, a variety of basic units were designed to meet the requirements which were stressed most by the people interviewed. By assembling the standard furniture frames into the many types of base units, an almost unlimited number of variations and combinations of finished assemblies can be made to meet individual school laboratory requirements.

Frees Floor Area

Particularly applicable to those schools in which all the science subjects are taught in the same room is the Multi-Purpose Laboratory Unit, designed to afford an efficient utilization of floor space. In a classroom, several Multi-Purpose Units, complete with the necessary wiring and piping, may be lined along the walls of the room, leaving the floor area in the room center free for student seating. Thus, the classroom is at once a science laboratory, a home room, or a lecture room. Individual school laboratory requirements determine the base units used with the Multi-Purpose Unit. The flexibility of this unit permits students at smaller schools with limited space and facilities to participate actively in the necessary laboratory experiments.

To fulfill the laboratory requirements of secondary schools, and to make these units flexible and functional, the same concept was applied to miscellaneous units such as instructor's desks, storage units, wash sinks and fume hoods.

Color Innovation

Research studies have proved that color has a decided effect on morale and productivity. Remarkable advancements have been made in recent years in using bright, cheerful colors to promote efficiency, reduce fatigue and ease eye strain.

To improve the efficiency of science teaching and learning, it was felt that standard black need not be the only color for laboratory tops. Previously, black laboratory tops were necessary because black pigment was the only type developed which could withstand and resist reagents.

Now, at last, colored laboratory tops are available—an innovation which will be of special interest to educators and architects alike. Adding color to laboratory tops, and new light finishes to the base units and other wood parts, beautifies the furniture in an aesthetic sense by permitting it to blend with the color scheme and decorative motif of the room. More important, however, light colored laboratory tops tend to reduce

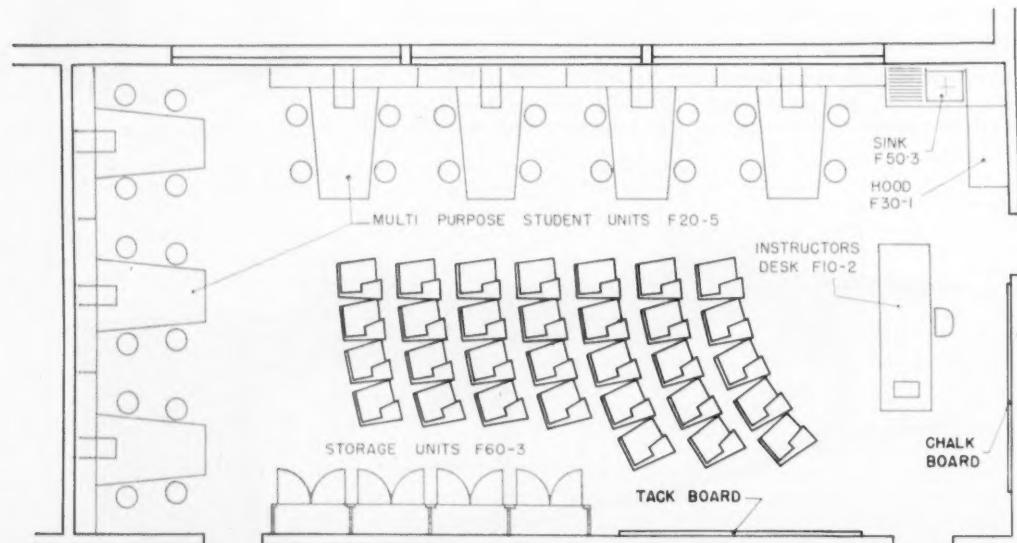
eye strain and fatigue and improve working efficiency.

Adapts to Changing Needs

By virtue of its flexible design and the many variations possible, this laboratory furniture has proved to be equally suitable for installation in new schools or for the renovation of older schools.

School administrators, architects and science teachers can now select the type of laboratory furniture required for their current needs. Should these requirements change, or a new need develop, the flexibility permits rearrangement to meet the specific need. This important feature eliminates the necessity of scaling down the scope of science instruction to conform with the laboratory furniture installed.

As is the case in many fields of industry, progressive manufacturers of laboratory furniture, in designing new equipment, maintain continuous research programs. A major objective of this research is to aid in the teaching of science in secondary schools by providing the science teacher with more flexible, functional equipment and by permitting a greater degree of student participation. That is the goal toward which laboratory furniture manufacturers are striving.



Typical floor plan utilizing the Multi-Purpose unit in a classroom layout.

SCHOOL PLANT

News & Views

Cooled Drinking Water In Public Schools

More than one-third of the nation's public schools have some sort of cooled drinking water facilities now in use. An additional 10 percent plans to install cooling facilities within the near future. Almost all of the cooled facilities are of the individual electric unit type, though nearly one out of every ten elementary schools is using or plans to install central cooling units.

Based on Survey

These statistic were compiled from a recent survey by THE SCHOOL EXECUTIVE on the use and location of cooled drinking water facilities in public elementary and secondary schools. Questionnaires were circulated to 980 public schools in population centers of 5,000 or more. Thirty percent of the schools responded. Questionnaires were also sent to 296 architects who had completed a public school building between January and November, 1952. One fourth of the architects responded.

The architects reported that in 1952, they specified only tap water facilities in 40 percent of their buildings. Almost half of them reported that tap water facilities are supplemented by individual electric cooling units. It would appear, therefore, that the individual electric cooling unit is coming into wider use. Secondary schools, regardless of size, use about three units, while elementary schools use about two units per school.

Location of Facilities

Tap water outlets were specified for every social space in the architects' 1952 school buildings. Indi-

vidual units were not specified as generally, nor were outlets of centrally cooled systems. The following table shows the percentage of times tap water outlets and individually cooled units were specified in various locations throughout the school plant:

Location	Tap Water Outlet (percentage)	Individually Cooled Unit (percentage)
Administrative		
Offices	30	9
Auditorium	21	12
Classrooms	54	0
Corridors	73	18
Gymnasium	45	3
Lobby	28	7
Dressing Room	28	1
Lunch Room	38	40
Grounds	49	0
Lounges	9	0
Toilets	23	0
Other Spaces	5	0

Housing the Whole Child

WHAT does it take to make a school building truly outstanding? Many modern school buildings have scientifically good lighting conditions, excellent systems of heating and ventilating, the best in furniture and equipment, and still are not outstanding. Is it possible that school plant research has been so concerned with certain physical improvements that the mental and emotional side of children has been all but neglected?

In a few instances, educators and architects working together have produced school buildings which have an atmosphere or environment which makes them stand out as extremely pleasant places in which to live, work and play. These buildings do more than meet physical requirements. They satisfy the "inner person."

The time has come when school plant research must be concerned with housing "the whole child." The emotional and psychological aspects of environment are at least as important as the physical aspect of that environment.

George W. Holmes, III
Educational Associate
P. C. Van Nuyts & Son, Architects

Recommended Reading

The Junior High School, Its Furniture and Equipment

By Engelhardt, Engelhardt and Leggett, Educational Consultants, New York. 1952. 179 (plus) pages, limited multilithed edition, \$7.50.

School executives and architects will find here a comprehensive handbook on junior high school equipment and furniture which long experience has proved essential. Too often a school building is planned and then equipment installed to fit the spaces. With this handbook, early selection of equipment and furniture can be made in terms of the requirements of educational functions. Then the planning of educational spaces may properly follow.

The practices of many school systems have been analyzed and the educational implications of the furniture and equipment needs have been suggested. The edition is limited to 100 copies.

SCHOOL PLANT

Core Curriculum Query:

Can You Put a New Program in an Old Classroom?

by **WILLIAM G. KNIFE**

INCREASINGLY, American educators are replacing their conventional programs with the social-civics core studies program—the "core curriculum"—which research and experimentation indicate will improve general education in the secondary schools.

Educational leaders who have ac-

cepted or are considering accepting the core program will want to give serious consideration to its special space requirements.

To be sure we are thinking about the same thing, let us agree that by "core program" we mean a program of education basically like that proposed by the Educational Policies Commission in "Education for All American Youth."

Aim of Core Program

Modify these programs slightly, include grades seven through fourteen, and let the core program be the area for developing citizenship and social-civic competence. Presumably, this core of studies is continuous from grades seven through fourteen. It is conducted in blocks of time by one teacher working with two groups

in three-hour periods in the lower grades, and tapering off to one-hour periods in the upper grades. Work in this core aims to develop civic competence and responsible self-direction through the study of important problems in contemporary life.

Learning Goals

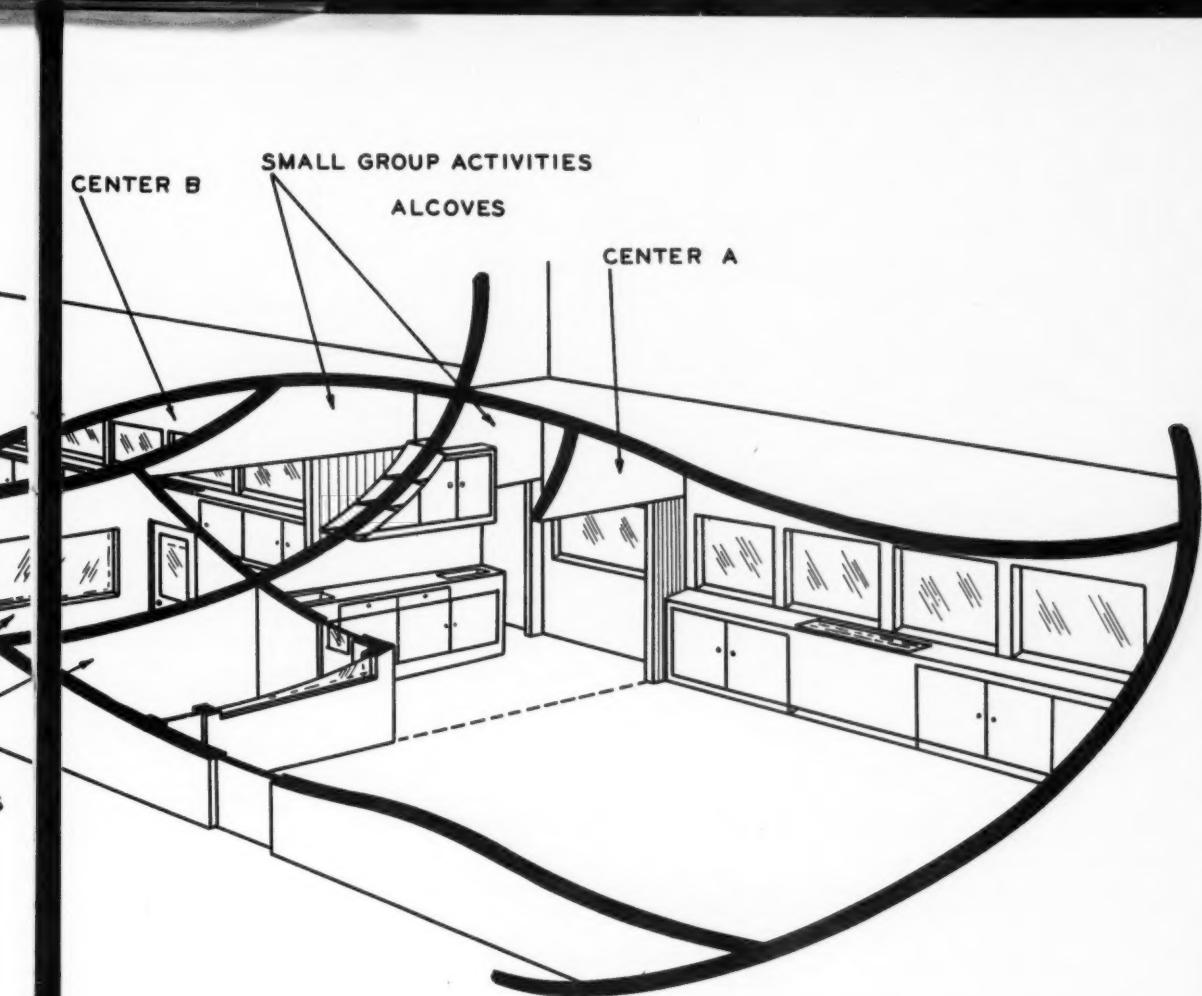
It includes learning how to live in a democracy, problems of school, community and social living, personal and group guidance, government, and health.

Methods utilized include group instruction, individual study and conferences and all the better tools of learning. Active learning for live use is emphasized.

As the core program is studied in the context of space requirements

William G. Knife is Assistant Professor of Industrial Arts at Santa Barbara College, University of California. THE SCHOOL EXECUTIVE hopes at some future date to bring its readers an article by Mr. Knife on his present project, "Tools and Work Tables for Constructional Arts Work in the Elementary School."





A social-civic core study center for grades 7 through 10.

for other parts of the educational program, two types of facilities emerge as definite needs. One is a highly flexible core center for grades seven through ten. The other is the flexible core center or double room for older youth and adult community use. The accompanying sketches of these centers were prepared by William T. Goodban under the direction of the author and Dr. Paul L. Scherer.

Discussion Groups

In lower grades where the core meets for three hours, only one teacher plus the grade core chairman, would normally work with two groups of about 25 youths each. Common planning, discussion and evaluating sessions of the two groups would be conducted together. Also

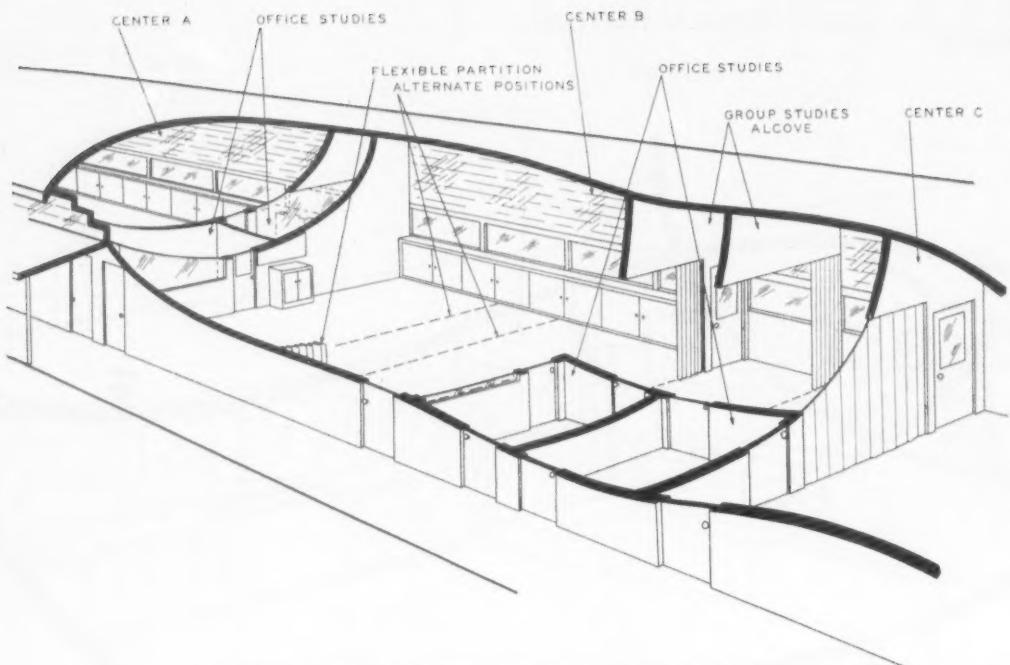
grade, class, and all school studies including group guidance would be conducted in joint sessions.

Needs Large Center

A large central room is required for these studies, which are done in a limited space in a quiet atmosphere using table area and chairs, chalkboard, resource personnel and visual materials. These conditions could be met with about 18 feet of space per student, or a total of 900 square feet per core center, not including auxiliary spaces. It has been calculated that in a school of a total of 800 youth, ten centers of this type would be needed.

The smaller group of 25 youth in working sessions of the core studies has needs that differ from those of the quieter joint studies. In these

sessions youth take a more active role. They investigate, prepare reports, work in action groups, use all sorts of resources, conduct experiments, construct graphs and charts, perform demonstrations and engage in project activities. Such studies require considerable space and the use of much equipment. To meet these teaching needs, core centers for younger groups require, in addition to a well equipped classroom, an activity area with utilities and equipment for project work. This auxiliary area should be approximately 150 square feet. In addition, in all aspects of core work we find the teacher-counselor supervising individual and small group studies, holding conferences and preparing teaching plans. These needs must be met by providing office-study spaces as part of each



A social-civic core study center for grades 11 through 14 and adults.

center. Approximately 100 square feet of space would appear to serve this purpose.

Multiple-Use Centers

Core centers for older youth must be more diversified than those for younger youth. Increasing life work preparation studies, covering typical knowledge areas and the core program, require larger core centers with features to make them suitable for multiple use. Within the same size school as used before—800 students—it has been calculated that five double-room centers would be necessary. Four of these centers when used as a whole should accommodate about 50 youth, and one center used by grade 14 and adults in community work should accommodate approximately 60 people. Through the use of flexible partitions these centers may be planned for division into smaller rooms that vary in size: two accommodating 20 youth, four accommodating 25 youth and four accommodating 30 youth. Thus, two core studies groups could meet for common sessions in a single center, or each center may be divided to provide several semi-separate spaces.

In older youth work the increasing use of small study groups, experiences requiring central attention and teacher-student conferences require small study alcoves. These needs are met by including teacher office-study spaces and small group study alcoves. One of these spaces should be centrally located with a clear view of the entire center. Approximately 25 square feet of space per student, figured on the larger group of 50 or 60, would provide the necessary room sizes, plus alcoves for older youth core centers.

Plan Storage Space

Related to each center, which becomes the heart of school life for youth in such a program, one would expect to plan facilities for storage of clothing and study materials. Water fountains, toilets and custodial service closets would make each center a nearly complete living and learning unit, supplemented by the community and all school facilities, such as the library, health, arts and auditorium centers.

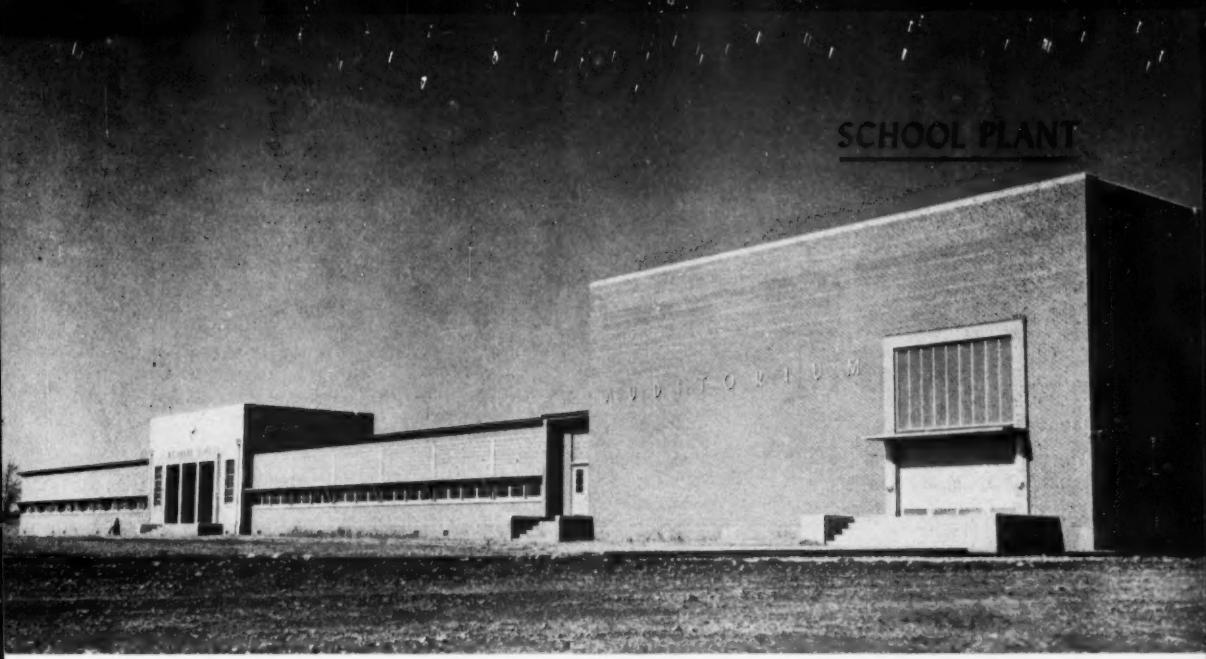
The internal planning of core studies centers would include movable furniture, audio-visual devices,

tack board, chalk board, storage closets, book and periodical storage spaces and, particularly in younger youth centers, adequate utility outlets. Auxiliary areas should have clear vision from the center and ready access to circulation spaces.

Cluster Facilities

Facilities for various youth groups could be clustered for ease of interchangeability and regrouping, and to aid in interaction of youth and teachers. The larger center for older youth and adults would become a major community room with informal furnishings and some additional equipment, plus related clothing and toilet facilities. Thus with proper location this center would have wider community use.

To sum up, the physical needs of a smooth-functioning **social-civic core** program are basically today's modern, well-planned classroom supplemented with flexible activity or small study group alcoves. In the future, however, we must plan centers for adaptability to multiple use and variations in group sizes, for you can put a new program in an old classroom, but you won't get optimum results.



The new W. C. Handy Elementary School for Negroes in Florence, Alabama, was built for \$8.20 per square foot.

Little Red Schoolhouse, Alabama Style

by L. A. CASTELL

THE new W. C. Handy School in Florence, Alabama, is the latest product of that city's tradition of providing excellent educational facilities for its Negro children. This school would be an asset to any community; for a Negro elementary school in the South, it is a milestone. The building can accommodate 500 children from grades one through six. Present enrollment is 360, but Superintendent of Schools J. W. Powell was building with an eye to the future.

Planning for Handy School was initiated more than two years before construction began. A thorough survey was made of the entire city to study population drift and concentration; meetings were held with teachers, students, civic groups and the architects; experts on educational facilities were consulted. The aim was

not merely to construct another school building, but to provide a Negro center that would serve the entire community.

The school occupies a fifteen-acre tract in the town's most thickly populated Negro district, known as Handy Hill. Both school and district were named in honor of one of Florence's most famous sons, the celebrated composer of "St. Louis Blues" and "Memphis Blues." The new school is located on the site of the house in which Handy was born.

Fourteen Classrooms

Handy school is a one-story, U-shaped structure, measuring 316 feet across the front with wings extending 138 feet. It has fourteen classrooms, a principal's office and reception room, private offices, a book storage room, teacher's lounge, a combination auditorium-gymnasium, girls' and boys' shower and locker rooms, a cafeteria and a kitchen. Ample space for playground equipment is avail-

able, and plans call for the development of an athletic field and stadium in a natural bowl nearby. Handy School will be used for athletic events, which is one reason for the shower and locker rooms.

The auditorium-gymnasium, which seats 500, has a full-size basketball court and hardwood floor. The stage is 24 feet deep with storage and dressing rooms on either side. A corridor runs across the back of the stage and into the wing corridor so that classrooms can be used as auxiliary dressing rooms for large pageants. The dressing room at the left of the stage doubles as a music room. Since the auditorium is also used for community functions, it was placed at the end of the East wing to allow such affairs to be held while school is in session without disturbing students.

The cafeteria, 24 by 70 feet, is completely furnished with up-to-the-minute equipment. Adjoining its kitchen are a storage room for staples and lavatory facilities for the cafe-

L. A. Castell is with the Vermiculite Institute, Minneapolis, Minnesota.

School in Negro District Named for Blues Composer

teria help. This, too, is in the East wing, making community facilities a compact unit. When the building is used at night, the school proper can be shut off from this section with an attractive stainless steel roller grill.

In the South, the biggest problem of school design is control of sunlight. Handy's classroom walls are virtually all glass from the 3-foot sill height to the ceiling, but directional glass block ventilating sash, used instead of clear glass, admits ample light while excluding direct sunlight and glare. Concrete overhangs above the windows keep the sun from entering Handy until 4:30 P.M., by which time school is over.

Large Glass Areas

Classrooms measure 24 by 31 feet. Local teachers prefer deep classrooms, and it was possible to gratify this preference and still have good natural light at the far side of the rooms because of the large amount of glass in the walls. Fluorescent lighting supplements daylight.

Desks are movable so that the teacher can make any arrangement

desired. Separate exterior doors were provided between the first and second grade classrooms, making it possible for those children to go directly to the grounds for outdoor classes. Ceilings throughout the building are acoustically treated. There are eight washrooms for the children, finished in smooth-face buff tile with a glazed tile wainscoating. One of the many "extras" in the school is a continuous tile shelf with rounded edges above the wash bowls to accommodate books and belongings. Separate lavatories have been provided for first and second grade boys and girls between those classrooms. The heating system is steam with wall-hung convection radiation.

Through careful selection of materials and efficient use of every inch of floor area, the architects, Turner and Northington, got maximum value for the money spent—\$256,000, or \$8.20 per square foot. Funds were provided by a bond issue secured by a gross sales tax.

Exterior load-bearing walls are face brick with back-up walls of structural clay tile. The main entrance is

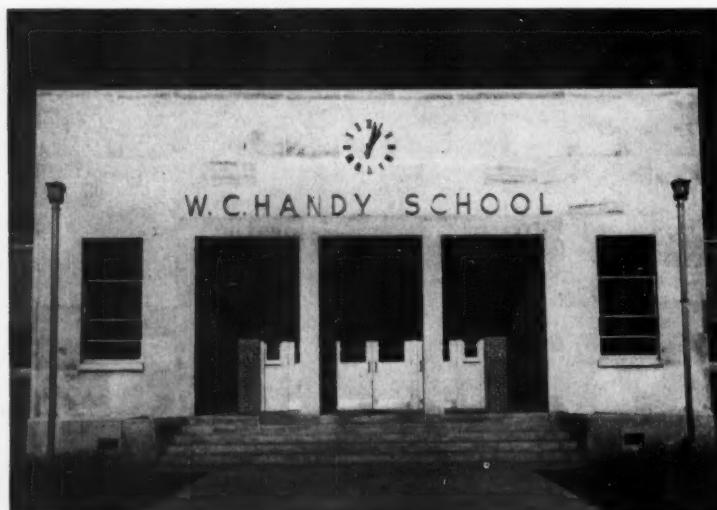
framed in cut Alabama limestone. Above the doors is a large clock with bronze numerals. There will be ornamental plantings on each side.

The floor, a 2½-inch concrete slab supported by pre-cast concrete joists, is finished in green asphalt tile. Underneath is a 3-foot crawl space in which steam and water pipes are concealed. Corridor partitions have pale green glazed tile wainscoting, which blends with the floor tile. Black glazed tile was used for trim.

Construction Details

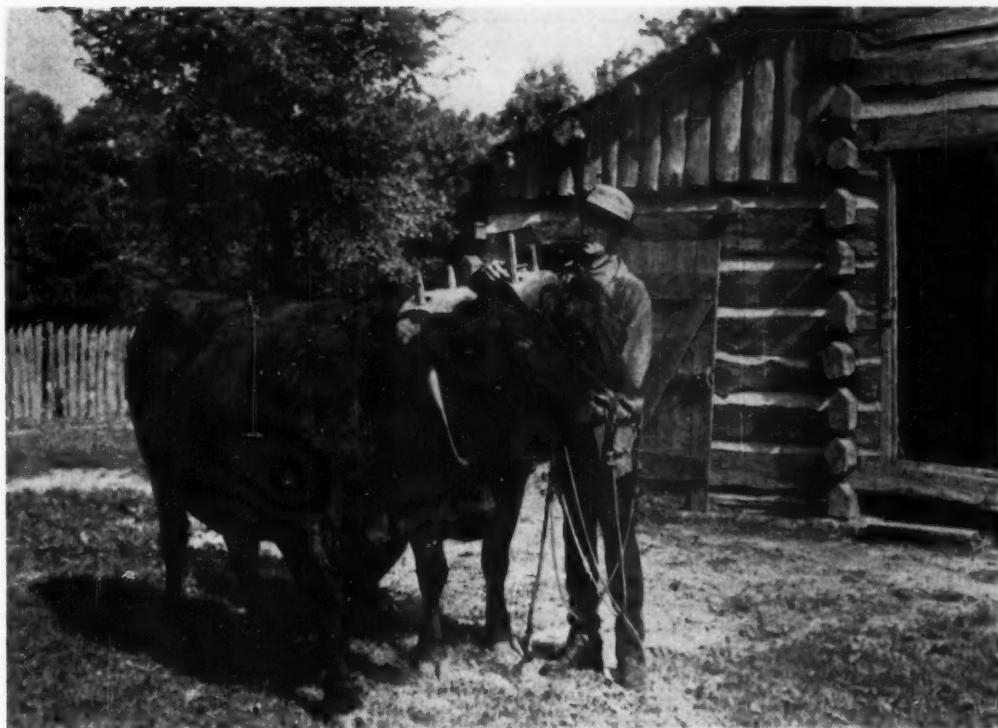
Roof construction is steel bar joists, 2 feet on centers, that span from the exterior load-bearing wall to the corridor load-bearing wall. These joists support a structural deck of vermiculite insulating concrete, 4 inches thick, on paper-backed wire mesh. With this lightweight concrete, a substantial saving was made in structural steel, and insulation and fireproofing were economically obtained. The slab is covered with a twenty-year bonded built-up roof of pitch and gravel. Copper fasciae were used for roof trim.

The school board specified a fireproof building to protect the occupants and to secure the lowest possible fire insurance rate over the years. To fireproof the steel roof construction, vermiculite plaster, 1 inch thick, was applied over expanded metal lath; elsewhere directly to the masonry. Interior partitions are plastered cinder block.



Architects Turner and Northington framed the main entrance in Alabama limestone.

EDUCATIONAL PLANNING



The economic problems of this American farmer of a century ago were simple by comparison with those which face present-day Americans at every turn. Wise decisions cannot be made without a thorough knowledge and understanding of economics.

Making Economics Meaningful

EVERY AMERICAN should understand the economy of his country. He should know the principles on which the economy is based. He should know the development of that economy and how and why it continues to evolve. He should understand something about the forces which strive against one another. Schools must help their students to know and understand these things. Our teachers must have definite preparation if they are to guide such learning wisely.

The Planning section in this issue deals with this problem. It presents views and practices which should stimulate all of us to further study, and cause many school systems to give renewed attention to this important problem.

"Few possess adequate economic understanding; still fewer consider economic problems unemotionally."



Though he live out his life on a farm, this boy must be able to join intelligently in making the economic decisions that will affect his community, county, state, nation . . . world.

Freedom is Indivisible

by Ernest O. Melby

ECONOMIC concerns belong to every member of human society—not to a few specialists. Regardless of how prosperous we may be as a nation or as individuals, we all face economic problems because we all have economic wants.

In spite of the obvious importance of our economic arrangements to all, few of us possess adequate economic understanding and still fewer think about the various economic problems unemotionally and objectively. Even where definite efforts have been made in the direction of economic education the concepts developed are often too narrow and the understandings too limited to enable the individual to participate wisely in the formulation of national, industrial or even individual economic programs. We need more thorough economic education, planned and carried out with a fuller understanding of the nature of the economic problems faced by our nation and by the world.

Schools Must Be Objective

The problem of economic education is by no means simple. Many businessmen want schools to teach the virtues of free enterprise, but they say little about the dangers of monopoly and are often silent about the great responsibility which must necessarily follow upon the possession of economic power. Similarly, organizations of labor want economic education which is sympathetic to the role of labor in our economy, but say little about the responsibilities of powerful organizations of labor in

This article is condensed from an address delivered before the Virginia Education Association, Richmond, Virginia, by Dean Ernest O. Melby of the New York University School of Education.

"Since they must be fair to all groups, economic education in schools will never satisfy any one group."

relation to society as a whole or about undemocratic practices within the organizations of labor themselves.

Since the schools belong to all of the people, they cannot champion the interests of any particular group in our society. They must of necessity be fair to the claims of all groups. They must deal with the problems objectively and with the broader social interest in view. This probably means that economic education carried on by schools and colleges will never fully meet the wishes of the various economic groups in our society.

But objectivity, difficult as it may be to maintain, is not the school's most serious problem in the area of economic understanding. The most serious problems grow out of the involved character of economic problems and the disturbing way in which these problems are interlaced with political, social, ethical and moral concepts. A striking illustration is to be found in the present conflict with international communism. The American people have reacted violently and emotionally, and as a result the conflict over communism colors and confuses our consideration of every issue—political, economic or ethical.

In the minds of many people, every practice followed by a communist country must necessarily be bad because communism as a philosophy is so largely in opposition to our own patterns of thought. Thus, our violent reaction to communism has often prevented a wise and unemotional consideration of many economic problems.

Results of Confusion in Terms

A further example of the involved character of economic problems and the confusion which at present surrounds them is to be found in the use of such terms as "capitalism" and "free enterprise." Anyone who has made even a cursory study of European capitalism and compared it with its American counterpart knows that there are sharp differences between the two. Yet there is stubborn insistence on the part of some people to equate American and European (notably British) capitalism.

This confusion in the public mind has two important and unfortunate results. In the first place, we as Americans rather arrogantly suggest to the British that their economy should depend as heavily as does ours on private enterprise. This does not make sense to the British, who have experienced a kind of capitalism very different from our own. At home the confusion is equally unfortunate. The fact that private enterprise has to a degree failed to solve Britain's economic problems is no reason why it should necessarily fail in America. We have a different kind of capitalism. It has tremendous success to its credit. In spots it has failed, but there is no good reason why we should throw out the baby with the bath.

It seems to me that perhaps the most important characteristic of the American scene with regard to economic problems is our tendency to take practical rather than theoretical steps toward the solution of problems. We have a marked tendency to use conservative language and to follow forward-looking procedures. For example, the very considerable isolationist talk which one hears in this

country is being voiced at a time when, as a nation, we are making unparalleled national expenditures in international directions. We talk against socialism at the very time when the government is heavily involved in social security, guarantee of bank deposits, financing of homes for veterans, financing of veterans' education and an agricultural program which certainly keeps the government deeply involved in our agricultural economy.

I believe that this typically American refusal to be doctrinaire is a national characteristic that has served us well. Under it, we tend to do things that need to be done by what appear to be the most practical means for their accomplishment. At any moment in our history progress may appear to be slow, but viewed in retrospect changes have taken place with amazing rapidity. While many of us quarrel with the "new deal" and the "fair deal," the fact remains that the major social gains of the last quarter century are now taken for granted by at least three-fourths of the American people.

Put Flesh on Idea Bones

To be effective, economic education must take account of all the conflicts, and the confusion which surrounds them. Our citizens must not only understand the meaning of various economic terms and systems but, what is more important, they must understand the meaning of America. On this point I believe our education has often been inadequate. We have taught our Constitution and its Bill of Rights, the Declaration of Independence, and many of the writings of the founding fathers without giving adequate background and meaning; without putting flesh and blood on the skeleton of ideas that we presented. Often, as a result, our children, young people and, for that matter, adults, have an inadequate understanding of the real and full meaning of our way of life.

Clearly, we are not going to meet the need for economic education by merely outlining the traditional meaning of such terms as capitalism, communism, socialism, private enterprise and the like. These terms need to be understood in their current setting in relation to our various economic, social and political arrangement. We need to see also their ethical and moral connotations.

Dangers of Urge to Orthodoxy

At present severe inroads are being made on our traditional freedom as a result of our efforts to eliminate the influence of communism in government and in our common life. A dangerous striving after orthodoxy stalks our schools and colleges. Acceptance of guilt by association and the technique of the big lie have brought oppression to thousands of innocent people. Many of those who plead the loudest and longest for economic freedom justify present witch hunts and loss of civil liberties for our citizens on the ground that somehow or other we must destroy the Communists and a certain degree of loss of civil liberties is the price.

Businessmen and political leaders who hold to such a view should recall that economic freedom does not survive for long after the loss of moral and spiritual freedom.

"I fear the effect of narrow concepts of education or economic education; isolated education is ineffective."

In Germany the big business interests came to terms with Hitler in the belief that they would occupy a throne seat in the new order. It was not long before they realized the tragic character of their mistake and were carried down to destruction with the rest of German society.

I have dealt at some length with the interrelatedness of economic, social, political, ethical and moral problems because I fear the effects of the narrow concepts of certain specialized types of education and economic education. From the standpoint of successful educational practice, we have found that isolated education is ineffective education. We cannot successfully teach honesty at ten o'clock on Tuesday morning and ignore it at other times during the week or year.

Similarly, economic education, crucial as it is in the current scene, is not likely to be effective if we view it as an isolated facet of our total educational program. Effective economic education means economic education which is part and parcel of our total education.

I am fully aware that this concept of economic education is one which is difficult to achieve in practice. But difficult though it may be, we must carry through because as we have said, "Freedom is indivisible." If our free economy goes down to defeat, our total freedom is lost eventually. Conversely, if we lose our moral and spiritual freedom, our free economy will not long survive.

There are some things which we as educators must in all honesty say to various groups in American society. To the businessmen who want free enterprise we must insist that they will not have it long unless they will help us to seek moral and spiritual freedom, social justice and the preservation of our ethical and religious values. To the representatives of labor who want higher wages and

The schoolhouse concept of education is outmoded. We must make the whole community part of an educational enterprise.



other benefits, we must insist that theirs will be an empty victory if followed by devastating inflation and concentration of economic power in the government with corresponding loss of moral and spiritual freedom. And to citizens generally, we must constantly emphasize the interrelatedness of the various problems that confront us. It is the educator's responsibility to interpret the full meaning of America to all of America.

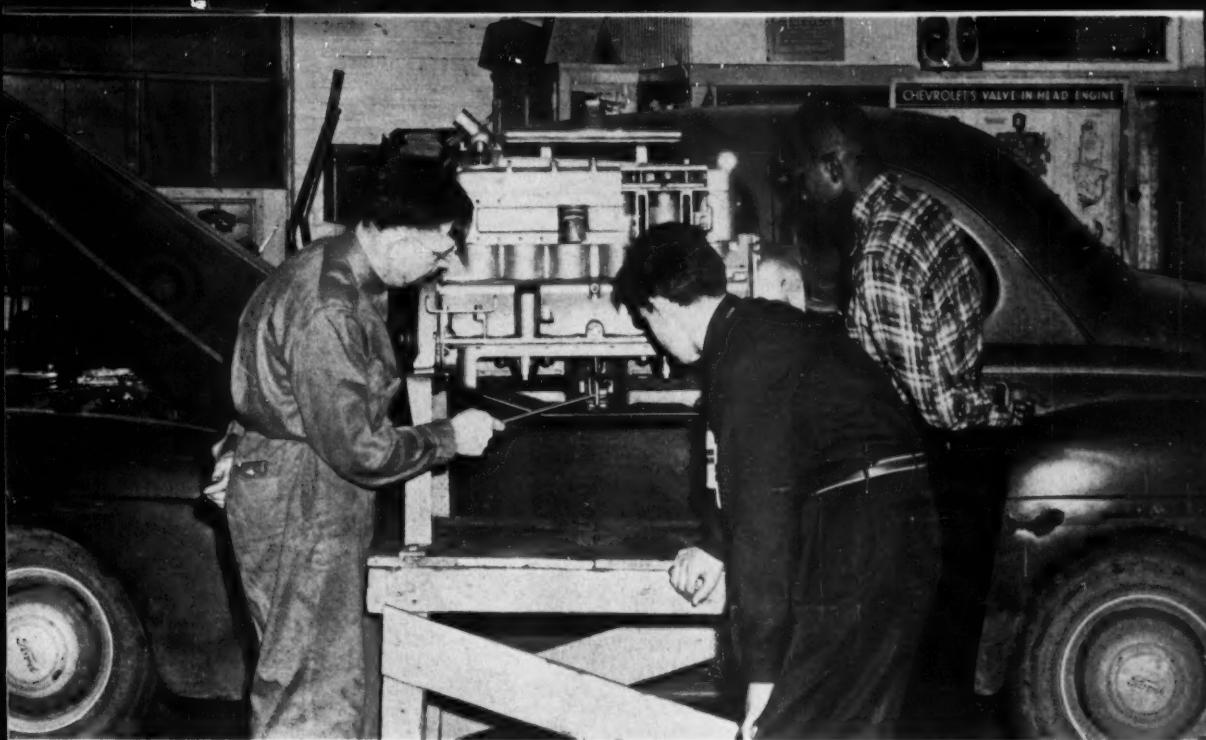
Join Forces with Community

In all this our responsibility as educators is heavy—so heavy it is obvious we cannot carry it alone. We must have the fullest cooperation of business, of labor and of the larger community, for without it we in schools will not be allowed to deal effectively with the problem. We will be buffeted about by special interests, objecting to this or that and insisting upon their special views, and if we accede to all such demands we can gain but economic illiteracy, a miseducated public, or both. A corollary is that labor, industry and the public must be informed and open-minded so that they will not make unreasonable demands on educators. We shall fail in this if we interpret education narrowly as having to do only with schools and colleges. The schoolhouse concept of education is ill-adapted to the current scene. We must marshal all our resources and make the whole community part of an educational enterprise.

One application may be found in the consideration of the problem of centralization. Excessive centralization of power in government, in big labor or big business has had profound effects on the local community. Where the individual once looked to his local government and saw himself as belonging to his community, he now often looks to the government in Washington or the C.I.O. or the N.A.M. or some other national aggregate. The result is that the cement which once held us together at the community level is crumbling. I do not believe we shall be effective in resisting the inroads of federal control unless we succeed in vitalizing the local community.

Here we have a fortunate coincidence of problem and opportunity for education. For if teachers, labor leaders and businessmen work together to vitalize the community, they will educate themselves in the process. We already have some beginnings on this score. The Joint Council on Economic Education is encouraging cooperative economic study at the local level. In Rochester, New York, representatives of business, labor and education are studying economic problems together. The Center for Field Services and the Center for Human Relations Studies at New York University are both undertaking programs which bring lay and professional people together in the study of community problems.

Is it too much to hope that similar cooperative patterns can spread throughout the nation and that leaders in education, business and labor can learn as well as work together? For one, I feel we had better undertake this task with understanding and zeal, for upon its successful development hangs not only the success of our economy, but the final triumph of all our freedoms.



Too many people who are masters of the complexities of the internal combustion engine or Latin grammar are functional illiterates where the economic laws and principles that govern their day-to-day lives are concerned.

The Joint Council on Economic Education Helps Launch . . .

A Frontal Attack on Economic Illiteracy

by Albert L. Ayars

THROUGHOUT THE COUNTRY, superintendents of schools have become concerned with the bluntly expressed feeling in their communities that the economic education of the people has been neglected and that a concerted effort to correct the situation is needed. Certainly, there are justifications for the feeling.

The ordinary person today—as worker, salesman, manager, consumer, and voter—is called upon to make decisions which affect the welfare of all. Economic citizenship and political citizenship have become inseparable. Many people believe that the survival of human freedom rests upon the ability of Americans to develop the economic attitude and understanding to promote sound economic policies. The school which accepts citizenship edu-

cation as a major responsibility must make provision for promoting economic competence.

As a producer and wage earner, a citizen's well-being is closely tied to the program of government—its fiscal and monetary policies and its social philosophy. If the citizen happens to be a businessman, his decisions will not be governed solely by the market. Local, state and federal regulations, the foreign commercial policy of government, the allocation of raw materials, and price controls influence the operation of his enterprise in one way or another and must be considered.

Political Choices Also Economic

In his role as a citizen in a democratic society, he is called upon to voice political choices that are also economic choices. Whether the issues in question be local—such as city sales tax; national—such as labor legislation; or international—such as U. S. participation in technical assistance to underdeveloped areas—the citizen cannot decide intelligently, in the best interests of his community and nation, unless his viewpoint is based upon

Albert L. Ayars, Associate Director of the Joint Council on Economic Education, was formerly Superintendent of Schools in Sunnyside, Washington. He has taught school administration at the State College of Washington.

"Schools cannot accept a do-nothing policy; economic education cannot be left to pressure groups."

a real understanding of his economic world. He needs a great amount of business and economic information even to comprehend the news.

Economic problems puzzle the teen-ager as well as the teacher, the farmer, the worker and the businessman, all of whom have highly complicated decisions to make. Yet thousands are functional illiterates insofar as economic facts and principles are concerned. These are some reasons why a frontal attack on economic illiteracy is essential. Public school men have lately hastened to institute programs to make up for lost time. Business-industry-education days, vocational days, industrial studies, labor-management discussions, and other such educational devices have been employed; and teachers have found anxious helpers. Trade associations, labor unions, newly created "educational" organizations, and other special interest groups, alarmed by the trends of social change, disturbed by the lack of economic education in the schools, and gripped with the single idea of telling their story, have sought to provide educational leadership and perhaps even to dominate educational policy-making, content of instructional materials, and teaching practice. Every gimmick of modern advertising and merchandising is being put to the task.

Too Many Cooks

This deluge of indoctrination and of sincere effort to help has complicated the task for educators who deal with the issues of the day. Some of these outside programs are excellent, some just good, and some biased and distorted. But if educators accept the help of one group, they are accused of "slanting" information the pupil receives and incur the wrath and increased counter-measures of the opposition, and vice versa.

So school administrators, supervisors and teachers, conscientiously striving to bring economic literacy to our children, find themselves struggling in the face of a cross-fire of pressures and emotional thinking symptomatic of a world suffering from the economic dislocations of war and its aftermath, and defense. It is now generally agreed that schools cannot accept a do-nothing policy and that economic education cannot be left to pressure groups.

Gradually a movement is growing which gives prom-

ise of helping to meet the need. It is based on the understanding that the individual community has a vital stake in economic education and that no program of curriculum revision and improvement will get far without the participation and support, not only of representative citizens, but of all the major constituent groups of the community. Participation is at the bottom of all communication. Imposition on the schools of a centrally designed program or pre-determined pattern for curriculum improvement runs counter to our educational tradition. Past attempts to communicate concepts to students indicate that such learnings can't be packaged and merchandised in classrooms like radio or television commercials. But educators working with the sound, solid, face-to-face help of labor representatives, businessmen and civic leaders within the community can and are making progress.

Joint Council on Economic Education

One effective effort promoting this new movement comes from the Joint Council on Economic Education, a non-profit, non-partisan educational organization formed in January of 1949 as a result of interest aroused by the first annual New York University Workshop on Economic Education held during the summer of 1948. The governing body is a board of trustees elected from the teaching profession, business, labor, and research organizations. It is financed through a grant from the Fund for Adult Education (established by the Ford Foundation) and the Committee for Economic Development.

The director of the 1948 New York University Workshop, Dr. G. Derwood Baker, N.Y.U. education professor, has been Director of the Joint Council since the beginning and has, with ever-growing support, led in the development of its now far-flung program.

Workshops Lay Basis

The Council has assisted in seminars, workshops, conferences and meetings enrolling some 15,000 teachers and lay, business and labor leaders dedicated to the advancement of economic education in schools and teacher-training institutions. Teachers representing every state and the Territory of Hawaii have attended workshops. That interest is growing may be inferred from the fact

A Virile, Growing New Organization

Is Stimulating an Unprecedented

Interest in Economic Education

"Facilitating the exchange of experiences and ideas is one of the Council's most important services."

The ordinary person today—be he factory worker, doctor, clerk or carpenter—is called upon to make economic decisions which affect the welfare of all.



that the Council co-operated in sponsoring three workshops in 1949, nine in 1950, fourteen in 1951, and twenty-five in 1952.

In these workshops, teachers study together the economic problems of their areas with the assistance of the nation's leading business executives, labor leaders, economists, agriculturists, curriculum experts, civic leaders, and others. They prepare teaching aids which are used in a down-to-earth manner in classrooms. After the materials have been tried and improved by teachers in the field, they are made available to teachers everywhere through the Joint Council. Facilitating the exchange of experiences and ideas is one of the Council's most important services. It also has the responsibility for promoting basic research on problems, methods and materials, stimulating basic studies, and in other ways giving schools practical assistance.

One of the most promising developments of the workshop program has been the formation of regional councils on economic education. These have been initiated in various sections of the country by workshop participants. They form an organizational base for future workshops and the stimulus for school and community action. They promote local in-service and adult education programs, hold mid-winter conferences, mobilize community and financial support for economic education, and provide a link between the schools of the region and the Joint Council.

The Council also maintains a consultant service through which it is able to advise on types of materials most needed and acceptable, workshop organizational

procedure, films available, and other matters of concern to teachers, labor organizations, religious organizations, journalists, textbook publishers, and socio-civic groups interested in the economic education movement.

As a result of initiative taken by the staff of the Joint Council, the Commission on Economics in Teacher Education was recently organized. Through the Commission, a cooperative working relationship among the professional organizations and associations concerned with improving teacher preparation has been established.

Enthusiasm Mounts

This nation-wide program has been developed by members of the teaching profession—representatives of public school systems, colleges of education, schools of business administration, and economics departments. A high degree of co-operation between academic economists and members of the teaching profession has been generated. The teachers, in turn, are in a position to find what's really on the minds of the customers—that is, what economic problems really need study by their students.

A detailed description of the projects of the Joint Council gives evidence of the great response to the economic education movement, which has expanded until it virtually blankets the nation. Rarely have educational systems responded so enthusiastically to a program for improving teaching methods and materials.

It's still just a start, of course—but a healthy one, and one of which any educator may become a part by writing the Joint Council on Economic Education, 444 Madison Avenue, New York 22, New York.

"Of primary importance: There can be no vital focus on community without focus on human relations."



Economic education has gone beyond the classroom; economics is being recognized as something that affects everyone, all the time.

Economic Education with . . .

Focus on the Community

by Paul W. Coons

THE GREATER HARTFORD Council on Economic Education is an organization of thirty-five persons interested in promoting realistic education for boys and girls. It seeks to develop understanding of economic problems by school administrators and teachers and to increase attention to these problems in various subject matter areas throughout the schools of the Greater Hartford area. Now in its fourth year, the Council has done the following things:

- Brought together in monthly Council meetings representative individuals from education, business and labor to plan means of alerting school administrators and teachers to basic economic issues.
- Made available materials and guides to the use of materials dealing with labor-management questions, insurance, taxes, electric power and other problems.
- Conducted three series of evening meetings to acquaint school leaders with community leaders and problems.

Paul W. Coons is Coordinator of School-Community Relations for the Hartford, Connecticut, Public Schools.

- Sponsored three fall conferences to highlight local problems of taxation, housing, defense effort, metropolitan cooperation, redevelopment, and migration of business and industry to and from the area.
- Cooperated with the University of Connecticut and the Joint Council on Economic Education in organizing and conducting two summer workshops on education for economic understanding for Connecticut school administrators and teachers.
- Distributed to local school systems bulletins written by workshop groups on ways to strengthen economic emphases in various subject matter areas.
- Secured funds from business, industry, organized labor, and interested individuals to finance the above activities at little or no cost to participants.
- Evaluated the impact of the program on personal growth and professional competence of participants in conferences and workshops.
- Promoted community awareness of the Council's actual and potential value in the development of responsible citizenship.

In a sense this is a community program, since Greater

"Even in dealing with international questions, an effort is made to identify their local relevance."

Hartford citizens from local school systems and from business and labor plan and carry out the various activities listed above. It would, however, be more accurate to say that this is a program with a community focus, since the main purpose is to engage a relatively small number of citizens, a majority of whom are school administrators and teachers, in conferences, workshops, and other activities with primary emphasis on area problems.

Even in dealing with broad national and international questions, an effort is made to identify the local relevance of great issues. Federal fiscal policy, world trade, trends in agriculture, principles of collective bargaining, the role of competition, the nature of profits, characteristics of the American economy—these are viewed not only in their larger aspects but especially in their relevance to the man on the street and the student in the classroom in Greater Hartford.

Sometimes the approach begins with a local problem and develops into a consideration of its relation to the broader scene, as, for example, when exploration of metropolitan problems of Greater Hartford leads to awareness of the general character of problems faced by all metropolitan areas in our century. In either event, the Greater Hartford Council on Economic Education invites school administrators and teachers to develop a curriculum with focus on the community.

Break with Abstractions

This is a program designed to break classroom activities away from the memorization of textbook generalizations and abstractions and to develop learning experiences around things of vital and recognizable concern. What are the tax problems of the towns of Greater Hartford? Are government services worth the cost? What are the strengths of the Greater Hartford economy? its weaknesses? its dependence on broad economic conditions? its importance for the nation and the world? On what economic activities does the livelihood of the students' parents depend? What kinds of jobs are open to Greater Hartford's youth? Is membership in a union desirable? What are the chances of entering the lists of business management in Greater Hartford? What local concerns illustrate the character of big business or small business? What in the local scene illustrates the importance of big labor and big government in the economy?

Direct consideration of questions like these requires shifting the spotlight; now materials on local problems, activities involving first-hand knowledge of persons and places, and sound understanding of the community by teachers rank high on the priority list.

Do teachers and school administrators who participate in Council programs put new life into old subjects by this kind of curriculum emphasis? The results as evaluated by a committee of the Council in 1952 confirm its faith in the worth of its efforts. Many classrooms were found to be engaged in study of community problems. Controversial issues were being dealt with candidly and more adequately because teachers had better materials for use by students and because encouragement by the Council

to face problems squarely gave them confidence. Exploration of local situations was reported to have involved numerous students in thinking about ways in which they might contribute to solution of problems. There was found to be a significantly increased use of community resources through media such as speakers invited to the classroom; trips into the community; student interviews with leaders of business, labor and government in Greater Hartford; and pamphlet material supplied by local concerns. The trend toward realistic education is increasingly in evidence.

It would be ungracious as well as inaccurate to fail to recognize the fact that, long before the Council began its work, outstanding individuals on the teaching staffs of the schools of Greater Hartford had taken pupils on trips, engaged community leaders as speakers and otherwise called attention to economic problems of the community. The special contributions of the Greater Hartford Council on Economic Education have been to organize this kind of emphasis, to involve school and community leadership in planning for the extension of teacher-training in community-focused education for economic understanding, and to provide official sanction and status for schools generally in the area to move in this direction.

A word needs to be said about the principles of operation which the Greater Hartford Council on Economic Education has evolved in order to give a sense of participation to all concerned and to insure the professional standing of the Council and its program. Seven out of a total list of sixteen principles follow:

- Participation in monthly Council meetings by every member on a basis of complete equality.
- Policies and actions valid as official Council activities only if approved at a meeting in which education, business and labor are represented.
- Members of the Council: representative individuals rather than representatives elected by schools or community groups.
- Majority vote on the Council held by educators.
- Keynote of Council programs: balance and objectivity. "Neither right . . . nor left . . . but responsible." (Paul Hoffman)
- Continuous evaluation by the Council of the effectiveness of its efforts.
- Promotion of friendly social relationships at all meetings, conferences and workshops.

The last-named principle is of primary importance. Indeed, it is probable that there can be no vital focus on community without focus on good human relations. This is an effort in which motion is not enough; there must be an atmosphere of mutual respect and confidence and good humor. The Greater Hartford Council on Economic Education has gone ahead on the theory that an informal conversation over the coffee cup can be potent motivation to hard work, and on the further theory that hard work can be the sinews of good fellowship. To date the results have justified these theories.



Some economics classes have formed Junior Achievement companies; they manufacture and sell various items.

How Schools Across the Country Are . . .

Motivating Economic Education

by Fred D. Wish, Jr.

IN COMMON with teachers, editors and Milton Berle, the Joint Council on Economic Education is always interested in whether or not it is "getting through" to its audience. Since the JCEE is not included in the Nielsen ratings, it carries on a continuous evaluation of its own to discover if and how information about our economy is reaching students. Findings from the various area councils, the follow-up activities of teachers attending summer workshops and other projects, and direct inquiry by the Joint Council all contribute to the total picture.

A direct inquiry by the Joint Council in Spring of 1952 elicited material indicating that teachers use three major approaches in interesting students in economic education—discovering and studying economic needs expressed by the students themselves, study of economics in terms of the local community, and "learning through doing."

"Social" Economics Stressed

Study of students' immediate economic needs is not to be confused with mere consumer education, valuable as that is. From the expression of individual economic problems, the student is taken into an understanding

of the operation of "social economics" and economic principles.

For instance, Earl Van Sickle started the 1952-1953 school year with his class in the Middlefield, Michigan, high school by checking and discussing a "pupil interest inventory" produced in the Michigan JCEE workshop. Then, through five student committees, economic principles and data pertinent to five major interests were prepared and presented to the class in a forum. Local resource people, films and at least one visit to business or industry were included in the study by these committees. The pupils' major desires were enlightening: to be able to be self-reliant; to be able to get and hold a job; to have a happy fear-free life in this atomic age; to establish a family and home.

English and Economics

District Superintendent Donald H. McIntosh of the Colton, California, Union high school built instruction in operating economics in his senior "problems of democracy" class around the problems of housing and household expense. Ellsworth Lory in the North high school, Des Moines, and many other teachers, used economics units in the course in home and family living. Alice Cary of the Springfield, Massachusetts, technical high school developed a unit on "You and Your Future" in her senior English classes. Economics in English classes is popular, and very valuable since most pupils are required to take English.

From the start of personal interests, alert teachers find

Fred D. Wish, Jr. is former Assistant Director of the Joint Council on Economic Education and former Superintendent of Schools of Hartford, Connecticut.

"Teachers and pupils gain broader viewpoints as the class gets away from 'two by four' instruction."

units in economics valuable in practically all subject fields, all types of schools and all levels of the school system.

The Joint Council on Economic Education believes that one cause for ineffective economic thinking is too much abstract "formula" economic teaching in our schools and colleges. In all its contacts with teachers, it emphasizes the necessity for applying economic principles; dealing with practical problems; laying the basis for decision and action "here and now." Along these lines, many teachers are developing excellent motivation through the "Know Your Community" approach. There are many fine examples of the use of this technique.

J. Ralph Spalding and other teachers in the Greater Hartford, Connecticut, Council on Economic Education produced "Hartford Taxes—Our Problem," which the local board of education printed for use in high school classes. This year the same group is centering its curricular study on "Problems of the Metropolitan Area."

Clyde William of the Valparaiso, Indiana, high school, using the class committee technique, studied that community from eight points of view involving economic problems for the individual or the city.

The Bristol, Tennessee, junior high school class of Martha Marshall prepared an 8 mm. film on "Bristol, Tennessee—A Good Place to Live." It was later developed into a handbook of the city.

Study Local Problems

Lucile Hodges and her twelfth grade geography class in the Claxton, Georgia, high school followed a similar plan on a more mature level. They discovered local economic problems and suggested solutions. Their findings were carried into PTA and other group meetings and later filed with the proper authorities for consideration in future community planning.

Alverda Seeley of the Elizabeth Waters school in Fond du Lac, Wisconsin, pointed a similar program toward a local centennial celebration in 1952. Applied economics was preceded by development of definitions and concepts by the class in terms of the pupils' understanding.

Two ninth grade general mathematics classes taught by Teasel E. Kennedy, principal of the Sauk Rapids, Minnesota, elementary and junior high school centered their economic study on "How Rural Electrification has Changed the Farm Economy." Since extensive electrification is very recent in that area and half of the pupils are from the rural area, this provided an interpretation of the changes which are now going on around them. Incidentally, through tables, graphs and charts, mathematics was learned readily by even the most reluctant pupils.

Economic education through the "know your community" approach produces three very valuable by-products: the here-and-now approach motivates improved learning of the "3 R's" and other skills by the more reluctant pupils; school-community relationships are improved as each understands the other from intimate

contact; and teachers and pupils gain broader viewpoints as the class gets away from "two by four" instruction . . . instruction confined within two covers of a book and four walls of a classroom.

"Learning by doing" is sometimes difficult to apply in social studies, but the Joint Council on Economic Education finds this approach to economic education increasingly popular. After verbal instruction on factors in our economy students come to grips with economic problems in Junior Achievement groups. Under this technique, developed by Junior Achievement, Inc., a group of youth interested in forming a company meets outside school hours. That company organizes, finances itself, produces, sells and at the end of the year dissolves. The teacher, in applying this technique, aids the class in developing itself into a company.

Run Junior Wall Street

The students of L. E. Mortenson in the junior and senior social studies classes of the Trace, Minnesota high school bought and sold securities hypothetically, basing their activities on reports in the daily papers. Four economics classes in the Ottawa Hills (Grandville, Michigan) high school, under the leadership of Russell Jones, actually bought and sold stocks during the past school year. They also formed a credit union. One hundred or more eighth graders in three classes at the Cumberland, Tennessee, high school formed their own mutual savings bank after careful study which included interviews with bank officials. In their promotion they emphasized the desirability of saving money for vacation needs.

Two eighth grade classes under the guidance of Lois Buollo in the East junior high school of Nashville also organized a credit union, then went out after business. As one device they set up a booth across the hall from the cafeteria. A student short on lunch money could borrow a dime, returning it with one cent interest the next day. Their loans, were strictly governed and their profit was good. As one of the officers wrote, "We have learned to save and invest money; we know the responsibility for paying our debts." That is pretty fundamental personal economics.

The "Sixth Grade Enterprise" and its successor "The Sixth Grade Trading Post" at the Fairmont School in Grand Rapids, under the guidance of Sylvia Roseman, illustrated the entire operation of American enterprise. These two companies, in successive years, formed corporations, sold stock, manufactured novelties, paid wages and dividends and dissolved at the end of the year. They even changed their product from season to season to assure good demand. They added banking and mail order business, making and sending catalogues to nearby schools. One or two pupils even learned the art and possibilities of stock control. Of course, all these activities automatically provide the motivation for learning information and skills called for.

All these case studies seem to demonstrate that economics can be learned by young students when presented in an interesting, pertinent manner.



Rusty has just broken his leash chain again in this opening panel of the film strip *We Depend Upon Each Other*. The incident of the single link that ruined the chain leads into a discussion of interdependence.

Des Moines Schoolmen Agree . . .

Business Can Help Teach Economics

by N. D. McCombs
and George W. Hohl

Dr. N. D. McCombs, Superintendent of the Des Moines Public Schools, is a charter member of the board of trustees of the Joint Council for Economic Education, Inc. Co-author George W. Hohl is Director of Elementary Education in the Des Moines Public Schools.

THE film strip *We Depend Upon Each Other* tells how members of a family are dependent upon each other and how people in communities and even far away countries need each other. It develops the economic concept so simply and sincerely that even pigtailed, freckle-faced youngsters can understand it. Behind it is another story of how our Des Moines, Iowa, public schools cooperated with General Mills, Inc. to produce a new tool for economic education.

Because economics is a part of high school and college courses, nearly all teachers and business people have felt this subject was too difficult for elementary school students to understand. General Mills' board chairman, Harry A. Bullis, and the company's founder, James F. Bell, both thought otherwise. They believed that most of an adult's basic opinions and convictions are established in childhood, and that while in later life these convictions may be rearranged, they are seldom changed.

Because General Mills holds that American businessmen have responsibilities to help children understand the world around them, Loretta McClernan, a former teach-

General Mills believes it is the duty of businessmen to help children understand their world.

er, was selected by General Mills officials about six years ago to head a program of economic education. She spent the first six months visiting teachers and other school people to see what they were doing in their schools and whether they thought economics could be presented in elementary school classes. The results of this preliminary investigation supported General Mills' and the teachers' belief that not only could it be done—it presented unlimited possibilities. A staunch supporter in this was Dr. Dora MacDonald of the Duluth, Minnesota, Board of Education, who stated, "Considering the number of drop-outs before high school, it is vital that economic concepts be presented in elementary grades if Americans are to appreciate their country intelligently."

General Mills set up a definite program for the purpose of preparing economic material suitable for use in elementary schools throughout the country. Once this program was set up, it grew and grew until today more than 400 school systems are using this material, among them our own Des Moines public schools.

We Depend Upon Each Other is one of the four teaching aids produced under this program to date. The others are a set of nine large colored panels, to stand on the blackboard railing, entitled *The Story of Bread*; a teacher's guidebook, *Working Today*, which accompanies the panels; and a film strip entitled *Specialization*.

The film strip *We Depend Upon Each Other* grew out of a meeting between C. F. Schropp, our director of Curriculum Development and Audio-Visual Education, and Loretta McClernan of General Mills during a workshop on economic education at the University of Minnesota in the fall of 1949. They discussed the film strip *Specialization*, which had been shown at the workshop, and the work of General Mills with the teachers of Austin and Duluth, Minnesota, in producing it. Because of the excellence of this material Mr. Schropp requested copies for use by our Des Moines teachers.

Teachers, Children Liked Material

The Des Moines teachers, as had other users, found that this film strip fitted into their elementary social studies program. They liked General Mills' initial collection of educational material because it captured the pupil's interest, and the children liked it because they could understand it and because two of their own class read the informal dialogue which accompanied the picture frames. Through this means of class participation, they became the real actors in the story.

But as experience with this economic education program increased Miss McClernan found that more materials were needed. The schools using the story panels on bread and the film strip *Specialization* wanted additional instructional material of a similar nature. The Des Moines Public Schools were invited to work with General Mills to produce a film strip covering another important phase of economics.

At a special meeting, Des Moines' school personnel discussed the matter thoroughly with Miss McClernan. All agreed it is imperative that children should under-

stand how we live, how we earn a living, how we distribute the things which young people see and use in their daily living, and many similar economic problems. Although we further agreed that elementary grade school children could grasp basic economics when the teaching methods and the instructional materials were based on problems they could understand, we did not agree on how this teaching could be done.

While we were anxious to have the help of genuinely interested business leaders, we did not want to be pressured into using materials which were biased or were merely sales propaganda for particular products. After these points were discussed and answered satisfactorily, we decided to work with General Mills to produce a second film strip.

At subsequent meetings, the economic concept "interdependence" was selected as an appropriate subject because it was common to many elementary school social studies programs. It was felt that ten-, eleven- and twelve-year-olds were already interested in how and where they fitted into the life around them.

Teachers Active in Planning

Accordingly, General Mills' representatives, together with Dr. Ray Price and Dr. Paul Wendt of the University of Minnesota, prepared a rough story outline as well as a suggested series of frames and dialogue for the new film strip. One fifth or sixth grade teacher from each Des Moines elementary school attended a dinner meeting to examine this material. Since many of these teachers had used the film strip *Specialization*, they were enthusiastic about helping to produce other similar instructional materials. They made so many constructive suggestions that a complete new outline had to be prepared. In fact, the material was reworked several times before everyone was satisfied.

As the technical work of preparing the actual photographs and accompanying dialogue progressed during the summer, the material was submitted for our evaluation at intervals until the completed film strip was given a premiere showing in Des Moines in the fall of 1950. The teachers who assisted with the preliminary work were all present, as well as representatives of Des Moines newspapers, the Chamber of Commerce, Iowa-Des Moines National Bank and the Meredith Publishing Company. The film strip itself was favorably received, although additional changes were suggested and incorporated into the material at the final printing.

Thirty industrial leaders, representing a similar number of our country's outstanding business organizations, attended the first showing of the completed film on January 17, 1951, in Des Moines. The businessmen visited ten fifth and sixth grade classrooms. The presentations were made by teachers who had worked closely with representatives from General Mills in planning and producing the material. These business leaders, too, were pleased with what they saw.

A representative comment was that of T. F. Robertson, Director of Public Information, Eastman Kodak Com-

One educator stated: "It is vital that economic concepts be presented in the elementary grades."

pany, who said, "It was stimulating to find a school system exploring enthusiastically a problem that is of so much importance to all of us in this country. I am sure that the visit will generate a like enthusiasm and effective work on the part of the other organizations, such as those we visitors represent."

As a result of the Des Moines conference, some of these business organizations are considering initiating projects involving the production of instructional material with the aid of classroom teachers and others have already completed plans for a cooperative program in this important area.

New Material in Preparation

Of utmost significance is the fact that the teachers and children of Des Moines enjoyed their part in producing *We Depend Upon Each Other* so much that they are continuing their work with General Mills. They are now preparing a booklet built around the economic concept "freedom of choice."

It is interesting, too, that the Public Relations Society of America requested that this film strip be presented at its fourth annual convention in Chicago in November, 1951. A sixth grade group from the Braeside School of Highland Park, Illinois, demonstrated the material before 800 representatives of this national organization.

Today the details of General Mills' economic education program are being carried out by its Department of Public Services, directed by Vice-President Samuel C. Gale and administered by Cyril W. Platten. These teaching aids are loaned to schools, free, upon request.

Our experience with the General Mills' program reaffirms our conviction that through the combined efforts of industry and education an important contribution to the supply of functional instructional material can be made. This concept is clearly defined in the following excerpt from the 1951 Yearbook of the Association for Supervision and Curriculum Development:

"Publishing companies and producers of instruc-

tional materials develop the kinds of materials that are needed and demanded by teachers. When sufficiently strong demands come from teachers for more functional materials, items of this nature will be forthcoming. There is great need for publishers (and producers) to pioneer in developing new materials based upon the problems and concerns of children and young people. In order that this new development may be accelerated, teachers not only should inform publishers of their needs, but also should participate in production of the new materials."

General Mills' materials avoid the obvious weaknesses of many other industry-produced aids to education. This is a significant accomplishment in view of the results of a recent survey by Hill & Knowlton, Inc. for the American Iron and Steel Institute which shows that much of industry-sponsored material is too difficult to use, contains too much advertising, is biased, fails to distinguish facts from opinions and assumptions, and is dull.

Today industry is recognizing that if it wishes teachers to use the instructional materials it prepares it must direct this material towards common but important objectives in our economic way of life. Samuel C. Gale, vice-president, General Mills, Inc., pointed out at the Des Moines conference that such programs cannot be thought of as advertising, neither should the teaching material be slanted or biased.

It is our conviction that American industry has a great responsibility as well as a unique opportunity in helping to meet this challenge of teaching the basic truths of our democratic economy. The General Mills experiment is one effective approach to the broad problem. It is succeeding because it was organized with help from competent educators, built to their design, and integrated into existing school programs. We are convinced that the combined efforts of educators and businessmen hold tremendous possibilities for increasing the child's knowledge and understanding of our democratic way of life.



This panel shows some of the people Jane and Bill, the boy and girl in "We Depend Upon Each Other," decide are links in the chain of a community.

The Washington Scene



Hundreds on hundreds of persons with tense faces, Negro and white, queued up a block long as the audience of the already over-crowded Supreme Court hearing room listened to the pleas for a history-making decision from the high court. The appellants were asking that the practice of segregating white and Negro children in separate public schools be declared unlawful throughout the United States.

The first plea came from Kansas. There is no Kansas statute or constitutional provision requiring segregation in the public schools. However, the Kansas statutes do authorize segregation in the elementary schools in cities over 15,000. The Kansas case was initiated by Negro residents of Topeka protesting the school board's policy of separating the races in its six-grade elementary schools.

Robert L. Carter of New York City, Negro lawyer, conceded that in Kansas the physical or measurable facilities, while "separate," were "equal." He based his whole case upon the "inferiority" imposed upon educational opportunity by segregation alone. The plea was for redress from an alleged violation of the Fourteenth Amendment. His contention was that segregation impairs the personality and unfavorably conditions the mental attitudes of Negro children. From the bench came queries with seemingly studied ambiguity. The Court does not expect to hand down its decision before June, 1953.

Paul E. Wilson, Assistant Attorney General of Kansas, presented the argument for upholding the segregation practices there. He contended that "laws pertaining to, and even requiring, racial separation in places where they are liable to be brought into contact do not necessarily imply

the inferiority of one race to the other." Moreover, he insisted that the decision was within "the competency of the state legislatures in the exercise of their police power."

Appellants from South Carolina, presenting an argument almost diametrically opposed to Wilson's, asked for a declaratory judgment that racial segregation in the schools violates the Fourteenth Amendment and for an injunction against such segregation. In South Carolina both constitution and statute make segregation mandatory, and last November the citizens of the state cast a decisive vote to amend the state constitution by repealing the requirement for free public schools. South Carolina may again lead in dissension, if segregation is abolished by edict of the Supreme Court.

While Georgia is not a party to the cases now before the Court, its legislature has passed a law which will automatically close the public schools at the instant segregation is abolished by the Supreme Court.

John W. Davis, former Democratic candidate for the Presidency, warned that a ruling against segregation would increase racial tensions and destroy local self-government, "the very fiber of our federal system."

The Virginia case came up from the high schools of Prince Edward County, a small county in south central Virginia with a population of about 15,000, half of whom are Negro. The Virginia constitution requires school segregation. Spottswood W. Robinson III of Richmond claimed that the appellants whom he represented had an immediate right to admission to a white high school since their right to equal facilities is "personal" and "present." Attorneys T. Justin Moore and J. Lindsley Almond for the state of Virginia warned

the court of the practical consequences if segregation is struck down. They quoted from a prediction former governor Colgate W. Darden, Jr. had made that "Virginians would refuse to give support to integrated schools with the result that the poor of both races would find their educational opportunities reduced and those who could afford them would go in even greater numbers to private segregated schools."

The District of Columbia came next in order. The Assistant Corporation Counsel Milton D. Korman, defending separation of the races in the District, declared that segregation, established during the Civil War after Congressional abolition of slavery in the District, was proposed as a means of helping the Negro and not "to stamp him with a badge of inferiority."

Unlike all the others, the Delaware case was an appeal to the state from a decree in favor of Negro plaintiffs of Newcastle county who had obtained a court order that immediate admission should be granted them to the white schools.

Integration of the American racially-separated schools would call for a more radical reorganization than any other educational reform. School buildings, teaching staffs and administrative provisions would have to be fundamentally revised in many states.

No one offered a philosophical defense of segregation. Many of those who held most tenaciously to custom agreed that discriminatory practices in education must eventually go, if for no other reason than that the maintenance of two school systems is economically unsound. The proposed action is opposed most often on the basis of central governmental domination and a feeling that the movement is being pushed too fast.

Among the possible decisions which will be handed down next June are: Immediate abolition of segregation on a nationwide basis; Reaffirmation of the previous Supreme Court decision which requires equal facilities for educational opportunity if segregated schools are maintained; Provision for the gradual elimination of segregation on a long term basis; Declaration of no jurisdiction; The establishment of some assignment system whereby all white or all Negro schools might continue in some places on a voluntary classification or districting system.

February is Month of Educational Conventions; Thousands of Educators Gather in Atlantic City, Cleveland and Los Angeles

AMERICAN SCHOOL CHILDREN in many states look forward to the "month of presidents" because it means two holidays—the birthdays of Washington and Lincoln. But for the people whose job is the education of those children, February will be memorable not as a short month with two holidays but as one of the fullest months in a very full year.

On Lincoln's birthday, for instance, the Association for Supervision and Curriculum Development will be winding up its sessions, and the Department of Elementary School Principals and the National School Boards Association will be plunging into three days of concentrated work. Members of the American Association of School Administrators will be making final preparations for their week-long convention in Atlantic City. This month of presidents and annual conventions will wind up with the American Educational Research Association convention February 16 to 18 and the National Association of Secondary-School Principals' meeting running through George Washington's birthday.

Largest convention will be that of the American Association of School Administrators which expects 15,000 educators to attend discussions on the theme, "Education for National Security." Such headline speakers as Walter Reuther, president of the CIO; Frank Abrams, chairman of the board of Standard Oil Company (New Jersey); UN Official Ralph Bunche; and Cartoonist Al Capp will consider this important current topic.

The Association for Supervision and Curriculum Development of the National Education Association is scheduled to meet in Cleveland, Ohio, February 8-12, to consider "Uniting Forces to Improve Education." Among the subjects to be discussed at this eighth annual meeting of ASCD

are social and civic competence, creative and esthetic living, communication skills, economic competence, and moral and spiritual values. Emphasis will be placed on school-community relations in all discussion groups and section meetings, and representatives of a wide range of community agencies have been asked to join the expected 2,000 educators in Cleveland.

Immediately preceding the AASA convention in Atlantic City, the Department of Elementary School Principals of the NEA will meet for three days to discuss "Bases for Effective Learning." Dr. Helen Heffernan of the California State Department of Education is the featured speaker for the opening session on February 12, and Dr. Walter Anderson of New York University will address the final general session.

Also meeting in Atlantic City Feb-

ruary 12 to 14 is the National School Boards Association. Several joint sessions will be held with the AASA. Attendance at the NSBA conventions has increased in the twelve years of the association's existence from 50 to 600 representing 35 states last year. An even larger crowd is expected at the 1953 convention.

The new Statler Hotel in Los Angeles, California, will be the meeting place for members of the National Association of Secondary-School Principals, a department of the National Education Association. Six thousand are expected to attend the five-day convention scheduled for February 21 to 25.

Also worthy of note is the meeting of the American Educational Research Association which will convene in Atlantic City, New Jersey, February 16-18.

Reservation of TV Channels for Education Heads List of Ten Major Educational Events of 1952

WASHINGTON, D. C.—Reservation of 242 television channels for exclusive use by schools and colleges was the top educational event of 1952, according to B. P. Brodinsky, editor of the *Educator's Washington Dispatch*. He announced his annual compilation of the ten major educational events of the year after consultation with educational editors throughout the country.

The action of the Federal Communications Commission in setting aside the TV channels for education has been compared in importance to the Ordinance of 1785, which made available public lands for public school systems," Mr. Brodinsky said.

Other major educational events of 1952, according to Mr. Brodinsky's compilation, are as follows:

- Congress enacted the Teague-Ran-

kin Bill, the G. I. Bill Number Two.

- The U. S. Supreme Court undertook to decide the legality of segregation in public schools.
- The National Council for Accreditation of Teacher Education began work to raise the status of teacher education.
- Congress defeated a plan to use revenue from off-shore oil for public education.
- The U. S. Office of Education appointed a Committee of Eight to re-appraise the basic vocational education acts and current programs under them.
- William G. Carr was named new executive secretary of the National Education Association.
- The House of Representatives defeated a proposal to enact universal military training.

- UNESCO was attacked from within and without.
- Enrollment in adult education programs under public school auspices took a sharp turn upward.

Larson, Hickey, Parker Elected to AASA Offices

WASHINGTON, D. C.—Jordan L. Larson, superintendent of schools in Mount Vernon, New York, has been elected vice-president of the American Association of School Administrators for 1953. He will take office March 15. He is also, by virtue of his election to this office, president-elect for the year 1954.

Philip J. Hickey, superintendent of instruction for the St. Louis public schools, was elected to serve as vice-president for a one year term beginning March 15, 1953. Clyde Parker, superintendent of schools in Cedar Rapids, Iowa, was elected as a member of the Executive Committee of AASA. He will hold that office for four years.

Lawrence Derthick, superintendent of schools, Chattanooga, Tennessee, will take over the office of president of the American Association of School Administrators for 1953 on March 15. He was elected to that office by the association a year ago, and served as vice-president of the AASA during 1952.



U. S. Commissioner of Education Earl J. McGrath, center, talks with Dr. Finis E. Engleman, left, president of the National Council of Chief State School Officers (Commissioner of Education, Connecticut), and Dr. Edgar Fuller, executive secretary, at a recent national conference of the organization in Washington, D. C.

McGrath, Phillips Emphasize Importance of Education Concerning the United States' World Responsibilities

WASHINGTON, D. C.—"In the long run, whether we discharge our world responsibilities wisely or foolishly will depend upon the success we have in educating our people through our great school system concerning the world responsibilities which have been placed upon us." U. S. Commissioner of Education Earl J. McGrath spoke these words before the recent national conference of Chief

State School Officers here. He went on to say that "now in the United States and in all democracies foreign policy is made by all the people, at least all the thoughtful people, and it is very important, therefore, that the schools prepare our young people for these important responsibilities."

Joseph B. Phillips, acting assistant secretary of state for public affairs, said that the relationship between education and foreign policy had never been more forcefully put than it was by the late Elihu Root, former secretary of state. He quoted Mr. Root as saying, "When foreign affairs were ruled by autocracies or oligarchies the danger of war was in sinister purpose. When foreign affairs are ruled by democracies the danger of war will be in mistaken beliefs. The world will be the gainer by the change, for, while there is no human way to prevent a king from having a bad heart, there is a human way to prevent people from having an erroneous opinion. That way is to furnish the whole people, as a part of their ordinary education, with correct information about their relations to other peoples, about the limitations upon their own rights, about their duties to respect the rights of others, about what has happened and is happening in international affairs, and about the effects upon national life



Lawrence Derthick, American Association of School Administrators President.



Jordan L. Larson, Vice-President and President Elect of AASA for 1954.

SPOTLIGHT

of the things that are done or refused as between nations; so that the people themselves will have the means to test misinformation and appeals to prejudice and passion based upon error."

Mr. Phillips concluded with his own words: "Certainly, the major responsibility for supplying the information rests with the Department of State. But I think part of it also rests with our educators. I say this because of the unmistakable relationship between the individual's educa-

tion and his views on world affairs. The Department must increase the scope and effectiveness of its two-way relationship with private groups and individuals and the educators must strive to instill in our students a realistic grasp of America's place and responsibilities in world affairs."

voiced by educators attending the 32nd annual meeting of the National Council for the Social Studies, a department of NEA. More than 1,000 high school and college teachers, including instructors in history, geography, economics and sociology, agreed that the nation's schools and colleges face a basic task of teaching youngsters "how—not what—to think."

A report on "Freedom to Learn and Freedom to Teach" prepared by the Council's Committee on Academic Freedom stated that "in defending freedom to learn and freedom to teach, we are defending the democratic process itself."

In a discussion of "Censorship in Learning Materials" Trevor K. Serviss, assistant editor-in-chief of the D. C. Heath Company in Boston, warned: "Censorship of learning may take many shapes and may spring from many sources but it is invariably bound up with more highly generalized attacks upon the schools. Those making the charges are usually of two kinds. First, there are those sincere and honest citizens whose interest in education sometimes exceeds their knowledge, but who are eager to cooperate with teachers in bringing about improvements. But the second group includes those who disturb all of us, for they are the self-appointed, dogmatic guardians of a way of life in which all must live according to the prescription of the few."

Maurice Ahrens, assistant superintendent of schools in Corpus Christi, Texas, added, "While constructive criticism is desirable and helpful, destructive and unwarranted criticism creates tensions and fears, which are reflected in the education of boys and girls."

Conference Calendar

FEBRUARY

2-6, Temple University Annual Reading Institute on Curriculum Approach to Reading Instruction, Philadelphia.

8-12, Eighth Annual Convention, Association for Supervision and Curriculum Development, NEA, Cleveland.

12-14, Annual meeting, NEA Department of Elementary School Principals, Atlantic City.

12-14, National School Boards Association Convention, Atlantic City.

14-19, American Association of School Administrators, NEA, Atlantic City.

16-18, American Educational Research Association, NEA, Atlantic City.

21-25, Annual Convention, National Association of Secondary-School Principals, NEA, Los Angeles.

24-28, Department of Audio-Visual Instruction, NEA, St. Louis.

MARCH

5-7, National Conference on Higher Education, NEA Association for Higher Education, Chicago.

5-7, Annual conference, Missouri Valley Adult Education Association, Kansas City Missouri.

19-21, First national convention, National Science Teachers Association, NEA, Pittsburgh.

APRIL

8-11, Thirty-first Annual Meeting, NEA International Council for Exceptional Children, Boston.

16-19, Twenty-third Institute for Education by Radio-Television, Columbus, Ohio.

MAY

4-5, Annual convention, National Association of State Universities, Columbus, Ohio.

JUNE

15-18, Seventeenth Annual National Conference, National Association of Student Councils of the National Association of Secondary-School Principals, NEA, Portland, Oregon.

28-July 3, Ninety-first Annual Meeting, National Education Association, Miami Beach, Florida.

29, Annual meeting, National School Public Relations Association, NEA, Miami Beach, Florida.

Colleges Show Enrollment Increase, First Since 1949

WASHINGTON, D. C.—Enrollment in the nation's colleges and universities has increased for the first time since 1949, Earl J. McGrath, U. S. Commissioner of Education, recently announced. Figures gathered from 1,900 higher educational institutions showed a total enrollment of 2,148,000 last fall, an increase of 1.5 percent above 1951. There is a decided upsurge in the number of students enrolling for the first time.

Part of the rise in number of col-

THESE STUDENTS

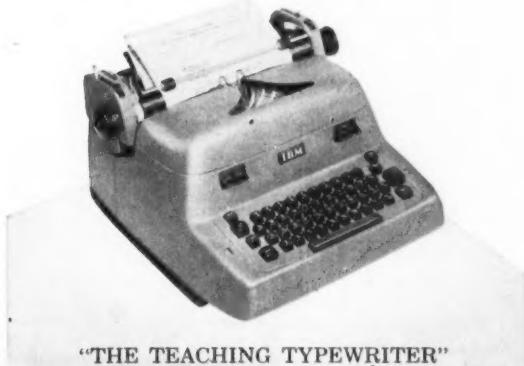
increased their net typing speed 33.5%



IBM
TRADE NAME

Electric Typewriters

INTERNATIONAL BUSINESS MACHINES



Henager School of Business, Salt Lake City, reports important progress in upgrading manual students after a short skill-building period on IBM Electric Typewriters. Results showed students achieved an average net speed increase of 33.5%.

Your students, too, can develop better skills using IBM Electric Typewriters.

• IBM, Dept. SE-1
590 Madison Ave., New York 22, N. Y.

Please send booklet, "Electric Typewriters in Education," and latest classroom results.
 We'd like to see your full-color sound movie, "Electric Typing Time," on _____
(date)

• Name _____

• School _____

• Address _____

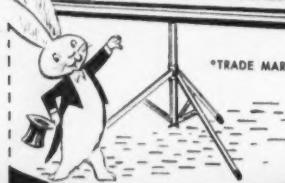
• City _____ State _____

see Da-Lite

color magic*

on a *White Magic**

Crystal-beaded Projection Surface



*TRADE MARK

the new Da-Lite
PUSH-BUTTON portable

Challenger SCREEN®

IS VERSATILITY PLUS!

8 SCREEN SIZES: 4 SQUARE &
4 RECTANGULAR FROM WHICH
TO CHOOSE!

WHITE MAGIC is an exclusive controlled process which gives the snow white projection surface special adhesive properties to hold more crystal beads. WHITE MAGIC is whiter, brighter . . . stays whiter, brighter—longer! There's no fading or yellowing. The COLOR MAGIC you enjoy from Da-Lite's WHITE MAGIC is yours for years!

See the complete line of Da-Lite WHITE MAGIC screens priced from \$3.50 to \$104.50 at photo dealers everywhere.

FREE New Booklet

Valuable suggestions on how to get greater brilliancy, more thrills from your color slides and movies.

Mail coupon today!

DA-LITE SCREEN CO., INC.
2761 N. Pulaski Road, Chicago 39, Ill.
Please rush me a FREE copy of the new
"COLOR MAGIC" booklet for improving
my movie and slide shows.

Name _____
Address _____
City _____ Zone _____ State _____

SPOTLIGHT

lege freshmen, according to Commissioner McGrath, can be attributed to the larger number of high school graduates last June and partly to favorable economic conditions. Wide publicity on the need for technically trained people, educational benefits for Korean veterans, student deferment policies and efforts made by individual institutions to increase the number of new students are other contributing factors mentioned by McGrath.

Educators to Discuss Status of United Nations

NEW YORK—Top American educators will join leaders and representatives of the United Nations to discuss the achievements and problems of the UN at the sixth annual United Nations Institute to be held here February 12-14. The institute is sponsored jointly by the UN Department of Public Information and New York University's School of Education.

Benjamin Cohen, assistant secretary-general of the UN Department of Public Information and one of the institute's main speakers, pointed out that the annual conferences have become an important part of his department's information program for the education field.

"It is very necessary at this moment," Cohen said, "to offer educators an opportunity to learn about achievements of the United Nations and assess its progress with officials of the organization. We, on our part, would like the chance to discuss with these educators all current objections to the United Nations and to present them with the facts."

Freedoms in US Schools Impress Foreign Teachers

NEW YORK—Teachers from Formosa, Indonesia, Burma, Israel, Austria and Paraguay were introduced to recent developments in American linguistic science and the teaching of English as a foreign language by a



Just 1/32" (whole size) faucet leak
MUSHROOMS into ATOMIC WASTE

of approximately 95,000 gallons

at water yearly-costing:

\$24.14

or \$1.00 per M cubic feet

If a hot water faucet (one actual)
FUEL WASTED heating 1000 gallons
costs approximately:

\$88.91 if coal (800 lbs.)

\$91.08 if oil (792 gals.)

\$84.41 if gas (84.6 cu. ft.)

Above figures authenticated by Hackensack Water Co. and American Gas Association.

STOP this needless WASTE during
today's MATERIAL and MANPOWER
shortages with **'SEXAUER "Easy-Tite"**
that's twice as strong as ever, with
6-to-1, the SAVING labor and REPAIR
repairs, PLUS water and fuel, while
prolonging the life of SANITARY fixtures.

PAT'D. "EASY-TITE"

FAUCET WASHERS

... a modern laboratory triumph, are compounded from **NEOPRENE** instead of rubber—in withstands DESTRUCTIVE HEAT common in present-day super-heating water systems—It formerly broke down washer's structure.

Built like a tire with fabric re-inforcement they resist the grinding, closing squeeze that SPLASH and MUSH ordinary washers out of shape... causing LEAKS.

Through combining **NEOPRENE** and **FABRIC REINFORCEMENT** they OUTWEAR standard washers 6-to-1 on hot or cold FAUCETS—thus you slash water, fuel and labor costs.

THE NEW 'SEXAUER' CATALOG

Edition G just out, 2500 TRIPLE-WALL splashing REPAIR parts and **Pat'd.** Precision Tools. It's today's accepted buying guide for discriminating purchasing and maintenance personnel among thousands of top PLANT, INSTITUTIONS and GOVT. AGENCIES that rely on **SEXAUER** repair materials. Order for your copy today!

Then too, there's a **SEXAUER** TECHNICIAN within quick call from coast-to-coast, who offers a special SURVEY service that sets up a schedule of the exact replacement parts required for your particular plumbing fixture—regardless of make or age and without obligation.

A postcard will bring him and your NEW Catalog promptly.

J. A. SEXAUER MFG. CO., INC. Dept. X-23
2608-65 Tenth Avenue New York 61.
as advertised in THE EVENING POST

SEXAUER
AMERICA'S LEADING SPECIALISTS IN
PLUMBING AND HEATING REPAIR PARTS

SPOTLIGHT

three-month, teacher education program at Columbia University, New York. The program, sponsored by the U. S. Office of Education, also gave them an opportunity to know American life and culture.

The group observed the equipment, school-wide activities and classroom situations in a variety of rural and urban schools in the New York area. They were impressed by the fact that American students are free to express themselves in class and that great emphasis is placed on subjects relating to good citizenship. Equally impressive to them was the fact that all the school systems in this country devise their own teaching programs, free from any central government office regulations.

Yale Professor Speaks on Public School Criticism

ST. LOUIS — Criticism of public schools by laymen in the past few years has been the most severe in the history of public education in this country, according to C. Winfield Scott of Yale University's Department of Education. His survey of such criticism was given before the education section of the annual meeting of the American Association for the Advancement of Science, which met here late in December.

The Yale speaker pointed out that adverse criticism has been aimed at all parts of the public school system. So-called progressive education has been attacked on all sides, Mr. Scott said, and frequently the criticisms contradict each other—some critics say it represents a "collectivist" philosophy, while other opponents charge that it gives the students too much freedom.

Another favorite target are the social studies courses, he continued, and here a common complaint is that the textbooks are "subversive." These charges "constitute something of a threat to every teacher who wishes to face the problems squarely and who believes strongly in the eventual supremacy of reason," he warned and went on to say that "to seek facts and

FIBERESIN*
Desk Tops

on
NORCOR

1st

FIRST in the FIELD and FIRST CHOICE of Leading Manufacturers for original equipment and School Executives for planned replacements on existing equipment. Write for details ...

FIBERESIN
PLASTICS COMPANY
OCONOMOWOC, WIS.

of course it's FIBERESIN

*Laminated board with melamine resin surface on dense core of wood fiber and phenolic resin welded at high temperatures and pressures in hydraulic presses.

SE-95

SPONSORS
of Trips
and Tours

PROTECT YOUR GROUP WITH OUR MEDICAL EXPENSE,
ILLNESS AND ACCIDENT BENEFITS

Hundreds of Travel groups have been insured under this policy. It is designed to meet your needs.

Write Today for Details
No Obligation

- Very Low Cost
- Prompt Courteous Service
- Maximum Benefits for Each

BROTHERHOOD MUTUAL LIFE INSURANCE COMPANY
210 E. BERRY STREET
FORT WAYNE 2, INDIANA

SPOTLIGHT

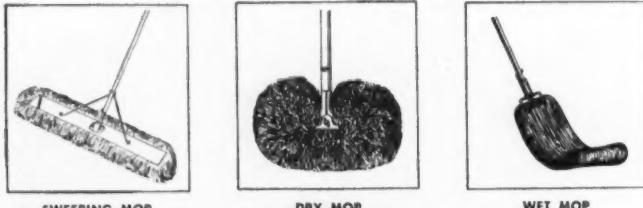


FIRST STEP TO LOWER MAINTENANCE COSTS

**The Right
Fuller Floor Brush
for Your Floors**

BIGGEST SELECTION — Over 170 different floor brushes. From 12" widths that clean conveniently around furniture, to 36" widths that make quick work of large floor areas. Brushes with specially blended centers of tough fibers for moving heavy refuse, and soft outer filaments for getting the fine dust. Brushes soft enough to bring out the gleam of a highly-polished, mirror-like floor . . . brushes rugged and tough enough for concrete floors and sidewalks. Brushes with triple-dense filler permanently gripped in a steel back that will never warp, crack or split. In short, Fuller floor brushes can save you money . . . because in the Fuller line you'll find the right brush for the job. To make sure you have the right floor brush for quick work on every job, send for new, illustrated catalog. Write to Industrial Division, The Fuller Brush Company, today.

MOPS — Wet or Dry — Fuller's the Buy



INDUSTRIAL



DIVISION

3556 MAIN STREET • HARTFORD 2, CONN.

Power driven brushes, Factory & Institutional cleaning tools, Waxes & Detergents

espouse free inquiry in certain problem areas today is to run the risk of being labeled subversive."

But some of this adverse criticism of the public schools may prove to be a blessing in disguise, Mr. Scott said. "Such will be the case if it stimulates professional educators to be more self-critical and efficient, and encourages educators and laymen to improve their understanding of education and therefore work together better as an educational team," he asserted.

"An Educated Citizen" Louisville's Finest Product

LOUISVILLE, KENTUCKY—Louisville, Kentucky, paid special tribute to its finest product, "an educated citizen," during American Education Week. As one part of that tribute a full page advertisement addressed to the citizens of Louisville appeared in the morning and evening papers. It described them as "stockholders" in that city's greatest enterprise—education, an \$11 million annual investment in the future. Part of that future, the ad said, is the children in today's world. They are the ones who will fly the skies, raise the crops, produce the goods, discover new cures, develop science and art, advance welfare and cope with world problems tomorrow.

New Orleans Makes Long-Range School Plans

NEW ORLEANS—An experimental School Village located on the periphery of New Orleans, which may point the way to a less rigid and static pattern for locating school buildings, has been proposed by the New Orleans Office of Planning and Construction. This plan is an attempt to exchange the advantages of the neighborhood school for a broader educational and better recreational program and the ability to insure adequate future school facilities for New Orleans' ever floating student population, Charles R. Colbert, direc-

SPOTLIGHT

SE.99

tor of the Office of Planning and Construction, stated.

Shortly after World War II a gradual exposure of some deplorable conditions within the New Orleans public schools brought citizens to action. By 1950 three new members had been elected to the board of education, and shortly thereafter the Office of Planning and Construction was initiated, a precedent-breaking action. Reporting directly to the board, the office will plan and supervise the expenditure of 25 to 30 million dollars for school buildings and equipment.

Nine months after the inception of the Office of Planning and Construction the first overall plan was delivered to the board of education. This plan contained, besides the School Village proposal, an analysis of existing facilities and a step-by-step procedure for realizing a "balanced" school system by 1970, Mr. Colbert said.

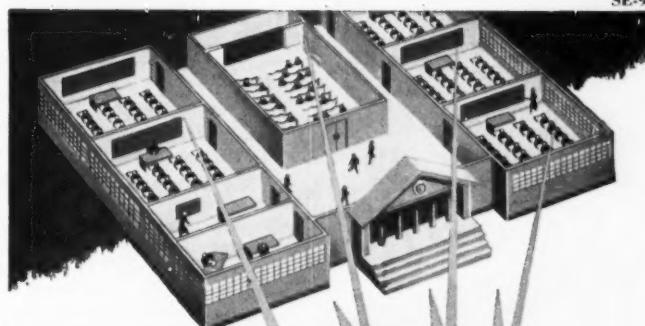
McGrath Calls Meeting on Language Study in Grades

WASHINGTON, D. C. — A national conference to discuss the increasing demand for foreign language teaching in public elementary schools was held in the Office of Education of the Federal Security Agency here January 15 and 16.

Earl J. McGrath, U. S. Commissioner of Education, said this is the first time the U. S. Office of Education has sponsored a major language teaching conference. The meeting gave leaders in general education and foreign language fields an opportunity to discuss at the national level problems of language teaching in public schools.

Some 300 persons including the chief state school officers of the 48 States, superintendents and principals of schools and representatives of educational branches of large national groups were invited to attend.

The conference grew out of an address made by Commissioner McGrath in May, 1952, before a meeting of the Central States Modern Language Teachers Association in St.



Educators hail new simplified school intercom!



More Efficient—Costs 50% Less than Complex Sound Systems!

Executone gives you instant voice-to-voice contact with every part of the school

Easier, more efficient administration can be achieved with this modern *low cost* intercom system. Executone meets all essential communication needs of every school!

Just push a button—for instant two-way contact with every classroom... to quickly locate roving personnel... to make announcements.

Teacher's privacy protected—Principals can study teaching methods via Executone. An optional indicator lamp signals when the "line" to a class is open. Calls to principal's office are signalled by chime and light.

Emergencies—During fire, or air raid

drills, Executone prevents confusion... quickly locates nurse or doctor... safeguards life and property.

Easily installed in existing and proposed schools. Large or small schools can expand their Executone with record turntables, radio tuners and public address speakers.

A time clock can be used in conjunction with Executone to automatically signal class periods.

A.A.S.A. Convention

See, hear, try Executone's NEW School System at Atlantic City, February 14-19!

Executone
SCHOOL INTERCOM SYSTEMS

Send for complete details.

Mail coupon today!

EXECUTONE, INC., Dept. B-10
415 Lexington Ave., New York 17

Without obligation please send:

Free descriptive literature.
 Name of nearest representative.

name _____ title _____

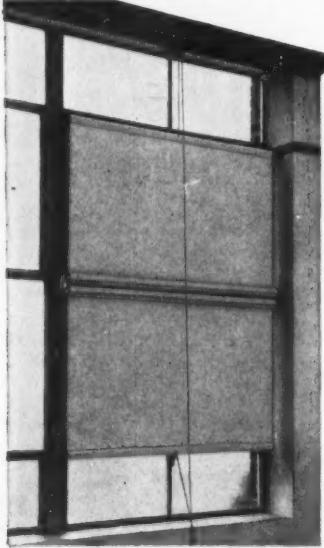
school _____

address _____

city _____ state _____

In Canada—331 Bartlett Ave., Toronto

DOUBLE YOUR SUNLIGHT CONTROL!



Patented

Draper V-DOUBLE roller shades give you 2-way control of daylight—one shade to pull up and another to pull down, as needed. The rigid V-shield eliminates all light gaps between the shades—does not rub and wear on the surface of the shade cloth.

DEMOUNTABLE OR PERMANENT

V-DOUBLE shade fixtures permit either demountable or permanent installation to metal or wood sash windows. Special projection fixtures provide proper shade support to clear sash latching devices and also protect shade from soil through window contact. V-DOUBLE shades are made from Tan or White DRATEX, the long wearing, vat dyed fabric that is easily and safely washable.

SEE the complete Draper Shade line in Booth H-22 at the A.A.S.A. Exhibit.

L. O. Draper Shade Co.	P.O. Box 398
Spiceland, Indiana	
Please send complete information on V-DOUBLE shades.	
Name	
School	
City	State

L. O. Draper Shade Co.
Spiceland, Indiana

SPOTLIGHT

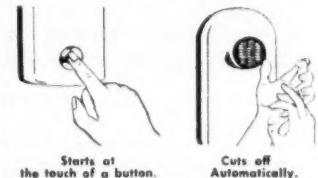
Louis. In that address he declared: "The United States is, whether we like it or not, in a position of world leadership. If it is to discharge its obligations wisely and well, our citizens must understand other peoples and other cultures. To gain such understanding many Americans must command a knowledge of one or more foreign languages. If children are to acquire language skills, our school system must provide opportunity beginning in the early grades for many children to study other tongues."

Commissioner McGrath cited evidence of what he calls "a revolution in language learning and teaching that is brewing in the elementary schools of our country." He reported that the movement is definitely mushrooming in the East, and he named school systems in this country devise which are initiating or expanding programs for language instruction in elementary schools.



ELECTRIC-AIRE HAND DRYERS . . .
Eliminate the MUSS and FUSS of
Handling and Storing Towels—and
Towel Littered Washrooms!

ELECTRIC-AIRE Evapo HAND DRYERS GIVE YOU ATTRACTIVELY CLEAN WASHROOMS WITH A CONTINUOUS DRYING SERVICE AT A MINIMUM OF COST AND ATTENTION!



INSTALL ELECTRIC-AIRE HAND DRYERS AND ENJOY ALL THESE ADVANTAGES — PLUS

- Elimination of fire hazards in towel littered washrooms!
- Elimination of plumbing bills caused by towel clogged drains!
- Fast, thorough drying — PREVENTS CHAPPING!
- Greatly reduced maintenance costs!

BIG ELECTRIC-AIRE SAVINGS — QUICKLY RETURN THEIR INITIAL COSTS AVAILABLE IN TWO MOUNTINGS—SURFACE OR RECESSED

Manufactured by the Electric-Aire Engineering Corp., specialists with 31 years of experience in the research, engineering and development of washroom service products.



FREE—"The Cold Facts on Hot Air", a factual survey of Drying Methods, Electric-Aire Catalog, and See-Loc Brochure, plus specifications and prices.

WRITE DIRECT TO DEPT. SE

ELECTRIC-AIRE ENGINEERING CORP.
209 W. JACKSON BLVD. • CHICAGO 6, ILL.
ELECTRIC AIRE Co. of CANADA
689 TALBOT STREET, ST. THOMAS, ONTARIO

SPOTLIGHT

SE-107

ful. Some of the major accomplishments of the committee in the last few sessions of the legislature include a county-wide non-resident tuition plan; increased state support for public education; a permissive tax levy for a construction sinking fund; a minimum nine months school term law; provision of funds to make possible state administration of the Federal school lunch program and to broaden the services of the Department of Public Instruction; a school district reorganization act to hasten the improvement of school units; a continuing contract law for teachers; and increased state appropriations for the care and education of handicapped children.

Civil Defense Has Biggest Education Job in Country

WASHINGTON, D. C.—"The task of getting Civil Defense information to 156 million Americans is the biggest single educational program ever undertaken in this country," said J. J. Wadsworth, acting administrator of the Federal Civil Defense Administration, Washington, D. C., in a recent statement.

"Every person in America," emphasized Mr. Wadsworth, "must be reached over and over again with adequate survival information. Some seventeen million Americans must volunteer and be trained for special Civil Defense service before the homefront can be considered ready to withstand an enemy attack." Mr. Wadsworth concluded that Civil Defense stands as a co-equal partner with military defense. If both are sufficiently strong, they can help stave off World War III, he declared.

New York Rural Schools Face Financial Crisis

NEW YORK—Unless state aid is immediately adjusted to 1952-53 price levels, more than 400 central schools throughout rural New York State face a financial crisis. This fact

SPECIALISTS IN CLEANING



... AND SANITATION

Let Wyandotte help you

STOP "STOREROOM LOSS" and **SAVE \$ \$ \$**

Are you confused about cleaning products? Do you know what products you *really* need? Read how fewer products can do your cleaning jobs better, cut inventories and save money!

Here's a money-saving suggestion which won't cost a cent; instead may mean an extra savings of hundreds of dollars for you!

It's simply this: Let a WYANDOTTE cleaning expert make an on-the-spot appraisal of your storeroom and your requirements. He'll show you ways to reduce the number of products you use, and at the same time, gain increased cleaning efficiency!

For example, you may be using several products—each for some one special washing or cleaning purpose. The WYANDOTTE service man will show you how one specialized WYANDOTTE product can be used for several different jobs—do them better, and at less cost to you! In short, he'll show you how WYANDOTTE's planned program of cleaning procedure, tailor-made to your requirements,

can give you more effective cleaning, at lower cost . . . enable you to avoid half-used inventories, save valuable storeroom space and cut your cleaning costs!

WYANDOTTE has tested and proved products made especially for your industry, and there's a WYANDOTTE service man nearby to give you immediate help or a demonstration. He has been trained in solving problems like yours.

Consult WYANDOTTE NOW! Send the coupon for more information. Wyandotte Chemicals Corporation, Wyandotte, Mich. Also Los Angeles 12, California.



Wyandotte
CHEMICALS

*Helpful service representatives in 138 cities
in the United States and Canada.*



Largest manufacturers
of specialized cleaning
products for business
and industry

WYANDOTTE CHEMICALS CORPORATION
Wyandotte, Michigan

Please send data on the following:

Name _____

Address _____

City _____ Zone _____ State _____

SPOTLIGHT



Toro tractor equipped with Toro Master Frame underslung hitch at Boys Town, Nebraska.

36 TORO MOWERS AT BOYS TOWN



H. W. Glissmann

Acres and acres of top-quality turf are kept velvet smooth with 36 Toro mowers at world-famous Boys Town, Nebraska. Harold W. Glissmann, Superintendent of Grounds, reports the job is done to perfection thanks to the rugged Toro tractor shown above—plus 5 Toro gang mowers, 7 power-driven, rotary-scythe Whirlwinds, and 24 Toro hand mowers.

Toro offers you the same first-rate performance. America's most complete line of power mowers is ready to give you machines designed to fill every requirement. And Toro machines are dependable—the choice of experienced operators all over the world.



WHIRLWIND S.P. High-capacity 24-in. rotary scythe mower . . . cuts fine lawns or weed-choked areas with equal ease . . . up to 6 acres a day. High-speed spinning blade with Suction-Lift action "mulches" clippings, eliminates windrows. Riding sulky optional.



THERE'S A TORO DISTRIBUTOR NEAR YOU
who is equipped to give you the best in mower service and fast parts delivery. For facts about Toro mowers see him, or write: Toro Manufacturing Corp., 2924 Snelling Avenue, Minneapolis 6, Minn.

was revealed by George D. Ryder, president of the board of education of Cobleskill, New York, in a report on a meeting of the Central Schools Committee for Educational Research. Mr. Ryder is chairman of the committee.

"Central school areas and other districts that have more children than wealth are now in serious difficulty because of the drop in buying value of funds now being provided by the state," Mr. Ryder declared, "and state aid is a critically important part of our budget." He went on to say that his committee passed a resolution that "fervently endorsed the recent action of the New York State Educational Conference Board, which called for an additional \$90 million in state aid to education to make up the loss in the schools' purchasing power."

The 430 central school districts in New York State serve more than 80 percent of the state's rural areas and educate nearly one-fifth of the children in the state. Yet they have less than one-fifteenth of the state's wealth, according to Professor Lorne H. Woollatt of Teachers College, Columbia University, director of the Central School Study.

Statement on Brotherhood Week Issued by Educators

NEW YORK—February 15-22 has been set aside as Brotherhood Week. Three educators, co-chairmen for its observance in schools and colleges, have issued this statement regarding Brotherhood Week.

"Our forefathers not only saw the crucial necessity of unity in our American society, but also they charged education specifically to be a great unifying force in this land of ours. That charge, education in America has kept. The roots of unity are spiritual and moral. They are nourished by man's regard for his fellow man. Men can dwell together in unity, but they have to learn to do it."

The authors of the statement are Laurence D. Haskew, dean of the College of Education, University of

REPORT	
Safety	A
Convenience	A
Speed	A
Versatility	A

...with the perfect

REPORT CARD

Insist on

BAKER SCAFFOLDS



Small schools with their limited budgets and large city school systems have found Baker Scaffolds a wise investment to reduce house-keeping expenses. They can be assembled or disassembled quickly and easily. The absence of "X-Bracing" permits the use of Baker Scaffolds in classrooms with a minimum of disturbance . . . they span desks, chairs and laboratory equipment so that overhead work can be handled at any time. Baker Scaffolds may be stacked for height to reach high ceilings in gyms or auditoriums and may also be arranged to cover large wall or ceiling areas. Here is the economical answer for all work that must be done off-the-floor.



WRITE FOR BULLETIN 531
Distributors in Principal Cities. Listed under Reexamination Service, Underwriters Laboratories, Inc.



SPOTLIGHT

Texas; Sister Mary Madeleva, C. S. C., president of St. Mary's College, Notre Dame; and Joseph B. Gittler, professor of anthropology and sociology, Iowa State College.

Instructional Materials Spending Found Low

WASHINGTON, D. C.—Most school systems are not spending what they consider the desirable amount per pupil for instructional materials and supplies, according to a recent report by the Educational Research Service, AASA and Research Division of the NEA (Circular No. 10, 1952).

A questionnaire sent out by the NEA Research Division unearthed these facts. Elementary schools reported that \$6.27 was the median of total expenditures for these materials and supplies, while they indicated a desirable median of \$8.75, a percentage increase of 40 percent. Junior high schools indicated a median total expenditure of \$9.00 as against a desirable expenditure of \$11.20 per pupil, a 24 percent increase. On the senior high school level the median total expenditure was found to be \$10.90. These systems indicated that \$12.38 would be the desirable median expenditure, a boost of 14 percent.

A total of all three levels gives this kind of picture: median of total expenditures is \$7.68; the desirable median expenditure is \$9.06. The percentage increase necessary to reach this level of spending is 18 percent.

Harvard Ed. D. Program Takes Clinical Approach

CAMBRIDGE, MASSACHUSETTS — A new kind of professional training program based on studying "administration in action" has been initiated at the Harvard Graduate School of Education. Twenty-two school administrators and teachers from all over the country are participating in the program, which aims to relate more closely the academic training leading to the Doctor of Education

**practically
indestructible
and quiet
Kys-ite
molded
plastic
tableware**



**and trays
for student
cafeterias**

Up to 5 times stronger than ordinary plastics, Kys-ite tough to chip or crack . . . stacking, carrying and washing can be done at top speed without any danger. Lightweight, quiet, eliminating all noisy clatter. Washes easily—manually or in machine, safe in boiling water. Stain-resistant tableware in maple color, red or brown trays.



50TH ANNIVERSARY 1903-1953

Keyes Fibre Sales Corp., Dept. SE 426 Lexington Ave., N. Y. 17, N. Y. Please send me further information on <input type="checkbox"/> Kys-ite Tableware <input type="checkbox"/> Kys-ite Trays
NAME.....TITLE.....
NAME OF SCHOOL.....
ADDRESS.....
CITY.....ZONE.....STATE.....
MY WHOLESALER IS.....

SPOTLIGHT



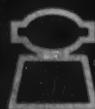
NEW...and you could call it the "School Duplicator."

There are two big reasons why you could call the new, inexpensive A. B. Dick spirit duplicator the "School Duplicator."

1. It is kind to the teacher. Everybody can run the brand new A. B. Dick spirit duplicator. It's that easy. Even ten-year-olds produce clear copies. And the new A. B. Dick spirit duplicator is fast. Gone are the usual hit-and-miss—trial-and-error starts. Now teachers can have copies in record time.

2. It is kind to the budget. Here is a machine priced in sympathy with today's stretched school budgets. And it's a long term investment. Like the A. B. Dick mimeograph, it's built to give years and years of service.

Here's a suggestion:—Get more information on the new A. B. Dick spirit duplicator. Just fill out the coupon below and mail it back to us. You'll have complete details in your hands without delay or obligation.



A · B · DICK
THE FIRST NAME IN DUPLICATING

Mail coupon for more information.

A. B. DICK COMPANY, Dept. SX-253-S
5700 Touhy Avenue
Chicago 31, Illinois

Send me more information about your new spirit duplicator and spirit duplicating supplies.

NAME _____ POSITION _____

SCHOOL _____

ADDRESS _____

CITY _____ STATE _____



Grove Patterson looks over a classroom in the new elementary school named for him with Miss Langenderfer, principal.

Toledo School Named for Living Civic Leader

TOLEDO, OHIO—As a rule it is political dynamite to name a new school for a living, active civic leader. Every school administrator finds that out. But Toledo's board of education, with hearty public approval, named its newest school after Grove Patterson, editor-in-chief of *The Toledo Blade*.

At the dedication ceremony, De-

AJUSTRITE

(Formerly Keweenaw)

AUTOMATIC ADJUSTABLE CHAIRS and STOOLS



TSC Models



TSS Models

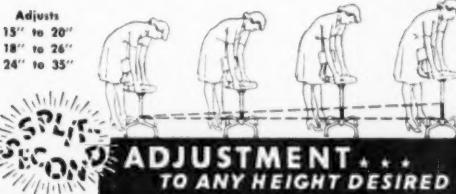
Used by many outstanding Schools, Colleges and Universities, (names on request). Laboratories, Vocational and Commercial classes, Medical and Dental clinics.

No screws, no bolts, no tools required. Self-aligning back rests, with horizontal and vertical adjustment.

Wide selection of adjustment ranges. Metal, plywood, hardwood seats or FOAM RUBBER cushion.

Write for literature and free trial offer.

AJUSTO EQUIPMENT CO., 2144 Madison, Toledo 2, Ohio



SPLIT
SECOND

ADJUSTMENT * * *
TO ANY HEIGHT DESIRED



CUT FLOOR CLEANING COSTS WITH FLO-PAC YARN BRUSHES

Reduce daily floor cleaning time . . . buy Flo-Pac Yarn Brushes. There's nothing finer for dust mopping smooth floors . . . asphalt tile, hardwood, linoleum, etc. Made from selected long-fibre cotton, trimmed 5½ inches, the deeply filled Flo-Pac Yarn Brush picks up all the dust and grit. Handy thumb screws permit easy disassembly for washing or replacement. Block sizes, 12 in. to 48 in.

SOME OTHER FLO-PAC MAINTENANCE TOOLS:
Rotary Floor Machine Brushes • Utility Brushes
Toilet Bowl Brushes • Wall and Ceiling Brushes
Sturdibowl Waxer Pads

176 ORDER FROM YOUR JOBBER TODAY

FLOUR CITY
BRUSH CO.
Minneapolis 4, Minn.



PACIFIC COAST
BRUSH CO.
Los Angeles 21, Calif.

SE-112

YOUR PROJECTOR is SAFER on the "Safe-Lock" PROJECT-O-STAND!

SE-114



ALWAYS
READY
for
INSTANT
USE!...

Yet no larger than
a briefcase
when folded

TOP AREA is 12" x 19"
Height range 24" to 44"
Weight 12 lbs.

"PROFESSIONAL" Model 203

1. Permanent-Mold Hi-Test Aluminum Casting.
2. Legs are fitted with LARGER SOLID STEEL TIPS which are threaded to screw directly into the casting. Result—100% rigidity; no play!
3. New Easy-Grip disc-type lock knob instantly locks and releases.
4. LEGS are TAN WRINKLED ENAMEL to match top casting.
5. Large 1½" diameter high tensile ALUMINUM LEGS.

only \$33.75 list



Aluminum top casting has beaded edges and extra deep girder-type ribs underneath for rugged strength. Complements any fine projector.

Ideal for schools, colleges, institutions, churches, gov't. and industrial dep'ts. Meets government specifications.

Designed to fill professional needs.
IF YOU HAVE NO LOCAL SUPPLIER USE COUPON TO ORDER NOW.



ADJUSTABLE LEGS
Fully adjustable, easy to set floor stage and permit quick aiming of image on screen.



RAISES OR LOWERS
Projector is high enough to clear heads of seated audience.



STRADDLES SEATS

Where there is no center aisle, seats can be straddled easily.



PORTABLE
Not only collapsible but truly portable. Handles and straps permanently attached, cannot be lost.

SPOTLIGHT

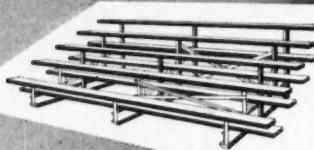
"the PANEL makes the DIFFERENCE" . . .*in Bleachers*

Whether you require a 3-Row or 30-Row Bleacher—Playtime's one-piece Welded Steel Panel offers you many exclusive advantages.

Only Playtime welds the most vital parts of your Bleacher into a solid, rigid, one-piece Steel Panel. This certified factory welding completely eliminates the possibility and hazard of these vital connections working loose under constant strain. Welding also seals these vital connections and prevents them from becoming moisture and rust traps.

Since the Panel is a single one-piece unit there are less pieces to assemble—the framework is stronger—entire Bleacher sections can be moved without dismantling and leveling can be easily accomplished by merely raising or lowering one end of the Panel. A treated, sloped end, oak skid bolted to the 5" steel channel base protects against direct contact with the moist earth and prevents sod damage when moving or relocating Bleacher sections.

Playtime has the exclusive Welded Steel Panel. Only the Playtime Welded Steel Panel can offer you these exclusive Bleacher advantages . . . to specify Playtime.



by PLAYTIME

in Risers

**added
value
for your
seating
dollar**

In the Riser as in the Bleacher, Playtime stresses safety, versatility, easy handling and assembly plus compact storage. All this is accomplished by using the exclusive Welded Steel Panel. All parts of the Playtime portable Riser are small and light enough for easy handling by a single person. Assembly is as simple as A-B-C.

Playtime Risers are available for Seated or Standing Chorus, Orchestra or Band. Portable Stages also available. Playtime portable Risers are suited for commencements, class or group pictures—indoor or out—and can be used for additional seating at basketball games and class demonstrations. Write for suggested layouts to fit your requirements.

Write for free, illustrated Brochure on Playtime Bleachers or Risers.

Distributors in 36 Cities

PLAYTIME EQUIPMENT CORP.

MARS, PENNSYLVANIA

ember 4, Mr. Patterson likened his concept of education to a cross. The strong vertical support he called the one deep and powerful basic of faith and knowledge upon which rests the broad horizontal crossbeam supporting the knowledge of many lesser subjects.

Art Educators Discuss Problems of Art Education

NEW YORK—More than 200 art educators and museum officials took part in a recent four-day conference on art in American education at Teachers College, Columbia University, sponsored by the college's Department of Fine and Industrial Arts.

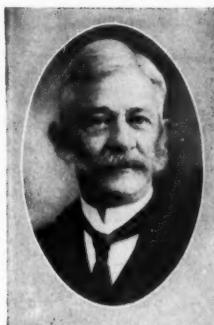
Featured at the conference was an exhibition of art work by children of Great Britain and the United States. The British collection was the largest of its kind ever to be shown in this country, and the joint exhibition was the first in which work done by children of the two countries was presented together for observation and study.

Professor Edwin Ziegfeld, head of the Teachers College art department, stated that the conference was "an occasion for leaders to study the problems of art education against a background of current critical issues and, through cooperative effort, recommend the character and direction of its development in American schools."

It Pays to Advertise Economic Concepts

NEW YORK—Neither the average high school student nor the average industrial worker associates competitive free enterprise with our high standard of living until it is clearly explained to him, according to a recent survey conducted by the Psychological Corporation for The Advertising Council.

The Council's economic education booklet, "The Miracle of America," was distributed to 50 high school students and 50 industrial workers in



*When you think of
Book Covers—
you naturally think of **HOLDEN***

HOLDEN COVERS are keyed to meet the demands of budget-conscious school administrators. They are made of specially designed papers to withstand abrasion and weather conditions—wear resistant, waterproof and weatherproof—The designs on the Covers are both educational and eye appealing—They *actually do* make textbooks last up to 3 years longer.

They keep books clean and sanitary
They are attractive as well as practical
Samples free

Holden Patent Book Cover Company
Springfield, Massachusetts

EAGLE builds a
LOW COST PACKAGED UNIT OF
FOR THE
FINEST
MODERN
TRAFFIC
CONTROL

SAFETY

FOR YOUR SCHOOL CROSS-WALK

GO with EAGLE

MAKE YOUR SCHOOL
CROSS-WALK A
SAFETY-LANE

WRITE FOR BULLETIN A10A

EAGLE SIGNAL
CORPORATION *Moline, Illinois*

The Eagle School Signal System is designed for push-button operation at required periods set on the time clock. Controller is flexibly designed to give all sequences required for Red and Amber School Signals.

One package unit includes two signal units as illustrated plus controller, special signs and two "School Ahead" signs.



Here it is!

The duplicating machine you asked us to build — A machine that will fulfill all school requirements at a price schools can afford.

WITH

Cyclomatic Action

ONLY
\$175*



*PLUS FEDERAL EXCISE TAX

NOW . . . A spirit duplicating machine especially engineered and designed to handle the hundreds of different school jobs. Built to OLD TOWN's rigid specifications of top quality — for rugged school use — high-speed production.

Here's the finest little duplicator that money can buy — featuring "cyclomatic action" which assures faster, more brilliant reproductions. Produces 1 to 6 colors at one time, in split seconds. Makes over 140 clean, clear copies a minute, of anything you type, write, print or draw — on varying weight paper or card stock; 3" x 5" up to 9" x 14". Clean, fast, easy to handle. Write for illustrated brochure TODAY on the revolutionary new OLD TOWN Model 95 Copymaker.



School Supply Houses:

The many unique and exclusive features of this new OLD TOWN Model 95 Copymaker assure you repeat business. Write TODAY for complete dealer franchise information.

750 PACIFIC ST., BROOKLYN 17, N. Y.
Made by the manufacturers of world-renowned
OLD TOWN Carbons, Ribbons, Duplicating Machines & Supplies

Presenting the NEW OLD TOWN MODEL 95 — SCHOOL COPYMAKER

SPOTLIGHT

Connecticut. This group and an equal group of students and workers who had not read the booklet were then queried about the reasons for America's high and rising standard of living.

Only 4 percent of the industrial non-readers of the booklet and 10 percent of the non-reader high school students mentioned competitive free enterprise compared to 24 percent and 42 percent respectively of the readers of the booklet.

Vocational Association Elects Martha Creighton

WASHINGTON, D. C.—Martha Creighton, professor of home economics at Virginia Polytechnic Institute, Blacksburg, was elected president of the American Vocational Association at the group's 46th annual convention held in Boston recently.

More than 450 persons from 250 communities throughout the United States, Canada and other countries contributed to sessions that covered every phase of vocational and industrial arts education. Total attendance at the convention was 3,000.

Speakers at the main sessions included U. S. Secretary of Labor Maurice J. Tobin; U. S. Chamber of Commerce Executive Vice-President Arch N. Booth; Roger M. Kyes, vice-president of General Motors, Dr. Franklin J. Keller, principal of New York City's Metropolitan Vocational High School; and U. S. Commissioner of Education Earl J. McGrath.

Principals Issue Report on Elementary Education

WASHINGTON, D. C.—Effective learning and teaching in the elementary school is examined in *Bases for Effective Learning*, the thirty-first yearbook of the Department of Elementary School Principals, NEA. A few of the problems it discusses are: the elementary school principal as a leader and pace setter; school-community relations; the well ad-



BRING YOUR CLASSROOM UP TO PAR!
Change your old black slate and composition boards to green

by using Endur Green Resurfacer, easy and economical; produces a brand new long lasting smooth writing surface. Available in light and dark green. For particulars including other special Endur finishes for schools contact your School Supplier or write Endur Paint Company, 75 North St., Salem, Mass.



ENDUR PAINT COMPANY

75 North St., Salem, Massachusetts

PROTECT YOUR BUILDINGS



WESTERN WATERPROOFING CO. SERVICES

CAN SAVE YOU THOUSANDS OF DOLLARS

Protection from Water Damage
(above-ground and below-ground, interior or exterior)

Tuckpointing
Building Cleaning

Over 35 years' experience serving all sizes and types of schools, colleges and universities.

No obligation for a thorough check-up of your structures. Write today for literature and references.

WESTERN
WATERPROOFING CO.

Engineers and Contractors

915 Olive St.
St. Louis 1, Mo.

A Missouri Corporation
Giving Nationwide Service

WHAT TO DO WITH THAT

DIRTY FLOOR?



CLEAN IT THE  WAY

GET SAVINGS GALORE!

Not only do you save on the original cost of your **WHITE** equipment — you also enjoy big savings in labor and material costs as a result of **WHITE** "engineered efficiency." See the complete **WHITE** line at your dealer's — you're sure to find the answer to your cleaning problems!

WHITE MOP WRINGER CO.
7 Mohawk Street

Fultonville, N. Y.

MOPMASTER OUTFITS



This husky unit pays its own cost in a short time by savings on your cleaning compound costs. Capacities up to 17½ gallons.

Write for CATALOG No. 150

WHITEY MOPZUM SAYS:
It's RIGHT . . . if it's

WHITE

A COMPLETE LINE OF FLOOR CLEANING EQUIPMENT

SPOTLIGHT

SLATE

... your best investment
in chalkboard visibility

Write for:

1. Copy of pamphlet "SLATE CHALKBOARDS ARE MODERN TOO"
2. Reprint of article "SLATE CHALKBOARDS PROVIDE EYE EASE"
3. Copy of instructions on chalkboard maintenance
4. List of modern schools using slate chalkboards near you
5. Personal assistance with your chalkboard selection

Other uses of slate in schools:

roofing
baseboards
sinks
window sills
flooring

shower compartments
laboratory table tops
toilet stalls
window stools
shelves

PSP
G

Pennsylvania Slate Producers Guild, Inc.
205 Realty Building

Pen Argyl, Penna.

SE-147

PETERSON
Fine Furniture Choice of
America's Leading Schools

For more than fifty years, school
boards throughout the country have
chosen Peterson quality furniture.
The Peterson staff of engineers con-
tinual research and experimental
work in collaboration with leading
educators assures you of equipment
designed in keeping with modern
teaching requirements. Your request
for free consultation and literature
is urged. No obligation of course.

LEONARD PETERSON & CO., INC.
1232 Fullerton Ave.
Chicago 14, Illinois



Susan B. Anthony

February, Birth Month of Five Famous Americans

NEW YORK—Program planners for America's schools will find rich resources for all subjects in the celebration of the birthdays of five famous citizens this month.

Susan B. Anthony, born February 15, 1820, is known as "the woman who changed the mind of a nation." Her fight for legal equality for women began in 1853 at a teachers convention in Rochester, New York. The men were discussing the question of why the profession of teaching was less respected than other professions when Miss Anthony spoke up. It was an unprecedented action, but her words struck at the core of the problem: "Do you not see that so long as society says a woman has not brains enough to be a doctor, lawyer, or minister, but has plenty to be a teach-

*How can we lick
this floor problem?*



...LET'S USE **LOXIT!**

"LOXIT-LAID FLOORS PROVIDE LONG SERVICE."

"As the school superintendent, I must insist on floors that are not going to cost more than they should; floors that are suitable for the rooms in which they are laid; floors that are going to be easy to maintain. The Loxit Floor Laying System provides me with the solution to these flooring problems."

"LOXIT-LAID FLOORS SAVE MONEY."

"As the architect I know just how important the Loxit Floor Laying System is to school construction and maintenance. Consider the economy factor alone: the total thickness of a Loxit floor using standard flooring is only 1½ inches, a saving of two inches in the story height. Too, experience has shown that a Loxit-laid floor costs from 10% to 15% less than the same kind of a floor laid with wood sleepers over a wood sub-floor. In addition, you eliminate nails,

adhesives and wood sleepers. Contractors like to work with the Loxit System too, because it is so simple to use."

"LOXIT-LAID FLOORS HAVE RESILIENCY."

"As the athletic director, I'm concerned with the physical well-being of our students. Gymnasium floors particularly must have resiliency to make them safe and easy to work and play on. Loxit-laid floors not only have the necessary resiliency, but in addition, they do not squeak."

"LOXIT-LAID FLOORS ARE EASY TO CLEAN AND MAINTAIN."

"As the maintenance man, the cleaning and maintenance of the floor is mighty important to me. Wood floors laid with the Loxit System do not creep and buckle. They 'stay put.' They are easy to maintain, and they always look nice."



LOXIT FLOOR LAYING SYSTEM

LOXIT Service

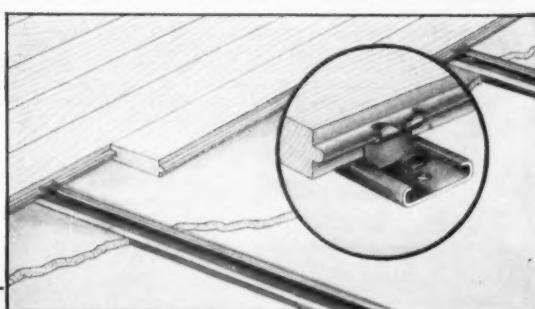
A staff thoroughly trained in building problems is at the disposal of school authorities, architects and contractors for the study of special or unusual floor problems.

Literature, samples and catalogs are available.

Write today, without obligation—

LOXIT SYSTEMS, INC.

1217 W. WASHINGTON BLVD., CHICAGO 7, ILLINOIS

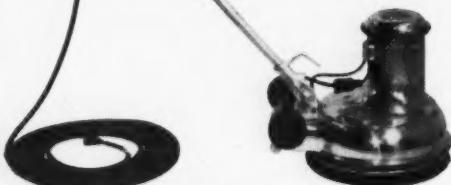


SPOTLIGHT

KENT celebrates its 40th Anniversary by

introducing another great Floor Machine!

KENT K-15



Amazingly quiet! "BALANCED POWER" gives such ease of control the operator does more work per hour, more hours per day . . . and "FLOATING POWER" — like floating power in your car — delivers power smoothly from motor to brush, adds years of life to the machine! The 15-in. diameter brush exerts 90 lbs. pressure on floor. Positive gear-driven — 2 gears only, in a continuous bath of grease. Equipped with 2 ball bearings, 2 roller bearings!



SEE IT and the KENT Quiet Triple-Power Vacuum for wet or dry work — at the National Education Show, Atlantic City, February 14-19, Booths C-27-29 . . . or write for details!

CLEAN WITH

KENT EQUIPMENT

The KENT Company, Inc.

• 420 Canal St. • Rome, N. Y.

SE-152

GREEN OR BLACK CHALKBOARD

IF IT'S
YOU CAN
Duracite
WASH IT!



New,
improved

Tongue and
groove joint
insures continuous
surface!

"HEAT APPLIED" SURFACE

Gives greater depth and more life!

Yes, you can wash DURACITE green or black chalkboards because their surface is *extra thick* and *extra strong* . . . actually fused on with heat! This quick heat method prevents settling of the silicon carbide, suspends it through the entire depth of the surface for years of fully

erasable and *fully washable* use! And, only DURACITE boards are one-half inch thick, with tongue and groove joints to completely eliminate surface breaking metal joints. In black or 19% reflectance CLEARSITE GREEN for greatest eye comfort.

Write for Catalog

*DURACITE is made only by

CLARIDGE EQUIPMENT COMPANY

4608 W. 20th St., Chicago 50, Illinois

er, every man of you who condescends to teach, tacitly admits before all Israel and the sun that he has no more brains than a woman?" The Nineteenth Amendment to the U. S. Constitution, giving women the right to vote, is known as the Susan B. Anthony Amendment.

George Washington, under whose leadership our nation gained its freedom; and Abraham Lincoln, the emancipator of the Negro, are remembered as pioneers of freedom. Their stories are well known.

February 11 is the birthday of Thomas A. Edison, whose inventive genius gave us a better telegraph system, a better telephone, the phonograph and electric lights.

Henry Wadsworth Longfellow, one of the best-loved American poets, was born into an old New England family on February 28, 1807. He became one of the legendary figures of our country and was the first American poet to be honored by a memorial in Poet's Corner of Westminster Abbey.

Schools, City Cooperate on Recreation in Dearborn

NAHMA, MICHIGAN — While the snow piles up in parks and playgrounds, the recreation program of Dearborn, Michigan, goes on in 25 school buildings turned over to the recreation department for fall and winter indoor activities. Exchange of facilities and a spirit of cooperation between the board of education and the Dearborn Recreation Department have given citizens of that city an outstanding year-round recreation program.

During the summer months five school swimming pools are used. The recreation department, on the other hand, makes five large recreation areas available for school purposes, and employs some 250 men and women to conduct their extensive program through the vacation months.

Dearborn offers all its citizens a well-rounded recreation program ranging from supervised playground activities, baseball and basketball

STEEL BARGAINS!

for School Shops...



The SUPER TINKER-PAK 15 lbs. **\$4.95**

Finest quality assortment of carbon and alloy steel Bars from $3/16$ " to $1/2$ ", Flats from $1/8$ " x $3/16$ " to $1/4$ " x $1/2$ ", Seamless tubing from $1/4$ " to $1\frac{1}{8}$ " O.D. Contains 12 pieces each approximately 36" long. Students can make or repair thousands of items!

SURE SPEC Flat Steel Assortment 100 lbs. \$9.50

This high quality Sure Spec flat steel package contains Hot Rolled, Cold Rolled and Coated rectangular pieces of 100 sq. inches and larger, from $1/16$ " in thickness and lighter. This is the only utility flat steel pack for school shops on the market!

SOLAR STEEL CORPORATION

Immediate delivery. Satisfaction is
Guaranteed. Terms 2%, 10 days,
30 days net. F. O. B. Cleveland,
Ohio. Send your orders to



General Offices
Union Commerce Bldg.
Cleveland, Ohio

"for service dependable as the sun"

SPOTLIGHT



SLIPERSTITIOUSabout black cats?

This morning a black cat crossed Mr. Bixby's path.

All day he waited for something nasty to happen. He wasn't disappointed. This afternoon he took a bad spill on the highly waxed floor of his office.

The building's Maintenance Manager moved quickly. Faced with the decision between calling the cat-catcher or a LEGGE Safety Engineer, he wisely chose the latter.

Your local Legge Safety Engineer can tell you the real reason behind slip-accidents.

A coating of wax protects floors against dirt and grime. Once buffed and walked on, the wax gets slippery as a skating rink.

LEFFE Safety Polishes safeguard floors with an attractive lustre and a slip-resistance that lasts—in spite of buffing and walking feet.

Black cats aside, your LEGGE Safety Engineer can help you eliminate the threat of slip-accidents. He'll save you important money in labor and materials, too.



Like a reprint? Just mail the coupon.

Walter G. Legge Company, Inc. D-2
101 Park Ave., New York 17, N. Y.

Please send a reprint of this ad.
 Send me your FREE booklet, "Mr. Higby Learned about Floor Safety".
 Have a Legge Safety Engineer phone me for an appointment.

Name _____

Firm _____

Street _____

City _____ Zone _____ State _____

clinics and leagues, crafts, community singing, dancing and camping for small children and young people to a Pleasant Hours Club for folks over 65.

Fewer Students Enroll in Vocational Education

WASHINGTON, D. C.—Enrollments in vocational education classes tapered off in 1951 after having risen almost 30 percent above pre-war figures, according to the Vocational Division of the U. S. Office of Education. While the programs in agriculture and home economics continued to rise over 1950 figures, enrollments in distributive occupations and classes in trade and industry declined.

Vocational education classes are about equally divided between adults and teen-agers. The most striking contrast is shown between urban and rural areas. Most large cities now provide vocational education, but less than half of the schools in smaller communities teach these subjects.

Of 24,000 American high schools, only one in seven provides training in the trades and one in 25 trains youth for the distributive occupations; 6,000 offer no home economics and 5,000 high schools enrolling rural youth offer no vocational agriculture.

New York University Plans European Workshop

NEW YORK—Sixty American teachers will have an opportunity to earn eight points of credit toward graduate degrees as participants in New York University's fourth European Workshop, Dr. Christian O. Arndt, professor of education at N. Y. U., has announced. Candidates will be considered, he said, in the order in which applications are received, with consideration given to professional background and personal qualifications.

Members of the workshop will spend July and August in Europe. They will confer with prominent leaders of government, social serv-

If you teach...

- Physical Ed.
- Square dancing
- Folk dancing
- Typing
- Music
- Speech
- Lower grades

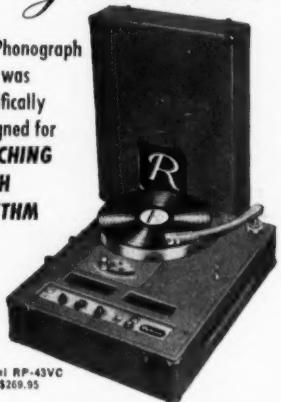


you are vitally interested in
TEMPO CONTROL
as it applies in your daily teaching

Now, you can control
the Tempo and the Beat of all
your records, with the new

Rhythmaster

the Phonograph
that was
specifically
designed for
**TEACHING
WITH
RHYTHM**



Model RP-43VC
\$269.95

The RHYTHMASTER, in addition to playing all your 33 1/3, 45 and 78 records at their normal speeds, is the only phonograph available that allows you to play any record at any speed which best meets the exact requirements of teacher and pupil!

The RHYTHMASTER is a complete, self-contained, high-fidelity, portable phonograph, designed for use indoors and outdoors...accommodating groups up to 1000 persons. It is a triple-duty instrument, serving as Phonograph, P.A. System and Radio Receiver, (used with your AM or FM tuner).

Powerful amplifier and speaker afford undistorted reproduction of your records and your voice at any volume. With microphone plugged in, the instructor can superimpose his or her voice over the selection being played, and supplement the record with personal comments and instructions.

Write for free illustrated brochure, which describes in detail, the complete line of REK-O-KUT Audio Equipment and its application in the Educational Field.

REK-O-KUT CO.

38-035, Queens Blvd., Long Island City, N. Y.
EXPORT DIVISION: 456 BROADWAY, NEW YORK CITY, U. S. A.
CANADA: ATLAS RADIO CORP. LTD., 560 KING ST. W., TORONTO 2B, ONTARIO



in Watches—in Food Warmers,

The easiest way to make people believe a second-rate watch is a fine watch, is to make it look like a fine watch.

The similar appearance of any imitation of the Thurmaduke is no substitute for the efficiency, economy and dependability of the sound, progressive design and engineering that goes into the original Thurmaduke.

Let your local Thurmaduke Dealer show you why it pays to buy the original Thurmaduke Waterless Food Warmer.

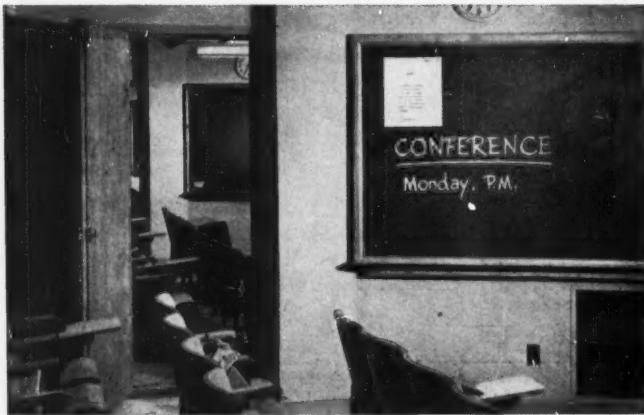
- 1 Selective Heat Control in each section reduces shrinkage, preserves flavors.
- 2 No unsanitary water-pan. Thurmaduke costs as little as $\frac{1}{3}$ to operate.
- 3 Efficiently insulated in all sides and bottom. Less heat loss—greater comfort.
- 4 Rigid, rugged all welded steel construction. Beautifully finished. Stainless steel or baked enamel finish.
- 5 Interchangeable top plates. Allows any top arrangement desired on any model.
- 6 No cracks or crevices to gather bacteria. All corners are round. No sharp edges.
- 7 Thermostatic control available on all models if desired.
- 8 Legs are easily adjusted for height. Stands solidly on uneven floors.

Write us for new Catalog S-2



A wide range of models available from Buffets and Portables to complete Cafeteria Counters

DUKE MANUFACTURING CO. • Originators—not imitators • SAINT LOUIS 6, MO

SPOTLIGHT

**In a class by itself
... double-duty**

ARMORPLY® CHALKBOARD

Armorply is the only chalkboard that serves you in *two ways*...as a superior writing surface and a magnetic bulletin board...at the same time.

An Armorply Chalkboard* installation (like this one at Harvard University) gives these other advantages also:

Takes chalk beautifully. Armorply's smooth porcelain-on-steel* finish is easy to write on and easy to clean off. Tests prove Armorply *will not choke with chalk*...never needs refinishing.

Gives maximum readability. Armorply's easy-on-the-eyes, chlorophyll-green color was selected by color experts after exhaustive research to give better reflectivity and higher light intensity values.

Makes notice-posting easy. Small permanent magnets hold notices firmly on the surface. Eliminates thumb-tacking, scarring holes, broken nails, difficult removal.

Guaranteed for life of building. Durable Armorply lasts and lasts. Won't warp, buckle, explode, shatter or break. Never needs refinishing, repair or replacement. Armorply means less trouble and lower maintenance costs.

Next time you plan a new school or the remodeling of an old one, for greater service, satisfaction and savings, specify research-developed, classroom-tested Armorply Chalkboard. For additional information mail this coupon today.

Armorply Chalkboard is sold only by distributors.

UNITED STATES PLYWOOD CORPORATION
55 West 44th Street, New York 36, N. Y.
World's Largest Plywood Organization

*Porcelain enamel finish produced by the Bettiniger Corporation.



UNITED STATES PLYWOOD CORPORATION
55 West 44th Street, New York 36, N. Y.

Please send me descriptive literature about Armorply Chalkboard.

Name _____

Address _____

School or Company _____ Title _____

ice and public education. Trips to such institutions as UNESCO in Paris, public schools in Great Britain and private schools and gymnasiums in Germany will give the American teachers first-hand information for instructing in world affairs and international relations.

Applications and requests for further information should be made to Professor Arndt, School of Education, New York University, Washington Square East, New York 3, New York.

Pamphlets of Interest

U. S. Office of Education

(The following may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

Health Services in City Schools by H. F. Kilander, specialist for health education. Bulletin 1952, Number 20. Price: 25 cents.

Recordings for Teaching Literature and Language in the High School includes a bibliography of articles concerning use of recordings and a listing of available recordings. Bulletin 1952, Number 19. Price: 25 cents.

How Children and Teacher Work Together is one of "The Place of Subjects in the Curriculum" series. Bulletin 1952, Number 14. Price 15 cents.

Where to Go for UN Information. International Organization and Conference Series III, 82. Price: 15 cents.

Science Research Associates

(The following pamphlets can be obtained from Science Research Associates, 57 West Grand Avenue, Chicago 10, Illinois.)

About You is designed to help teenagers understand themselves. Price: 96 cents.

A Book About Me and the accom-

maggi works magic

with

flavor!

MAGGI'S SEASONING

Sleight-of-hand with a dash of Maggi's Seasoning develops food flavor to its peak and keeps it there. Old-world chefs have used this trick for years . . . making the subtle hidden flavors of soups, stews, gravies, vegetables and meat spring to life.

IN HANDY QUART SIZE
WITH "STEADY FLOW"
POURING SPOUT



MAGGI'S GRANULATED BOUILLON CUBES

Cooking magic with Maggi's Granulated Bouillon delights the most discriminating patron. Enrich gravies, sauces, vegetables and stews with economical-to-use Maggi's . . . which also makes an excellent full-flavored stock or an instant beverage.

PRODUCTS OF THE NESTLÉ COMPANY, INC.
WHITE PLAINS • NEW YORK

maggi
world-famous flavor products
seasoning...
granulated
bouillon cubes

Booth J-40
AAA CONVENTION
Atlantic City
February 18-19



Model
#1624
Shown

THE
WRINGERS
WITH THE
AMAZING
SERVICE
RECORD

You Can't Beat the 1953 *Geerpres* wringers

Much of the amazing labor, time and cost savings possible with Geerpres Wringers is due to this EXCLUSIVE INTER-LOCK-GEARING. It multiplies the applied pressure, insures smooth and accurate control of wringing action; squeezes the mop DOWN, not out.

GEERPRES WRINGER, INC.

Manufacturers of High-Grade Mopping Equipment

DEPARTMENT SE, GEERPRES WRINGER, INC.
P. O. BOX 658, MUSKEGON, MICHIGAN

For the
complete
story, fill in
this coupon

Please send me complete information on
 All Geerpres floor-cleaning equipment.
 Geerpres "Floor King" (24 to 36 oz. mops) with
 single or twin tank.
 Geerpres "Floor-Prince" (16 to 24 oz. mops) with
 single or twin tank.
 Geerpres "Floor-Knight" (8 to 16 oz. mops).

NAME
COMPANY
AND
ADDRESS:

SE-109

BEEF STOCK...in an instant!



3 peppercorns • 2 lbs. Maggi's Granulated Bouillon dissolved in 2½ pts. boiling water • 1 tap. grated onion.

Add onion and peppercorns to boiling water; simmer 5 min. Strain and add Granulated Bouillon. Makes 1 quart.

SE-110



Cure Key Troubles with

TELKEE
Moore Key Control
A METHOD FOR FILING AND CONTROLLING KEYS

- Any key instantly available — lost keys never a problem
- Neat, compact metal cabinet — easy to set up and operate
- Expansion unlimited
- Control by secret code

Attach to
your letter-
head and
mail today

P. O. MOORE, INC., Dept. SE-10
300 Fourth Ave., New York 10, N. Y.
I would like to have, without obligation,
literature describing your product.
Name.....
Address.....
City, State.....

SPOTLIGHT

panying teacher's manual help teachers in elementary guidance work. Price: 50 cents each.

Exploring the World of Jobs is written for upper elementary and junior high school pupils. Price: 40 cents.

Helping the Gifted Child by Paul Witty discusses special problems presented by this group of children. Price: 40 cents.

You and the Draft outlines draft procedure and career opportunities in the armed forces. Price: 40 cents.

Colleges and Universities

A Survey of Surveys gives local school leaders suggestions for improving survey procedures. Division of Surveys and Field Services, George

Peabody College for Teachers, Nashville, Tennessee.

What is New in '52 for Guidance and Health? Department of Education, University of Wisconsin, Madison.

Fare for the Reluctant Reader is an annotated bibliography designed to help teachers select books for grades seven through twelve. New York State College for Teachers, Albany, New York.

Confluence, December, 1952, is an international forum on the media of mass communication and the social role of art and philosophy. Harvard University, Cambridge, Massachusetts. Price: \$1.00.

The People Look at Their Schools reports a survey of the Granite City, Illinois, Community Unit School district. College of Education, Office of Field Services, University of Illinois, Urbana.

Cooperative Survey Report of Educational and School Plant Needs, Woodmere-Hewlett, New York, Institute of Field Studies, Teachers



College, Columbia University, New York City.

Miscellaneous

Data to be Furnished Architects by Board of Education, Bulletin Number 15. The Association of School Business Officials of the United States and Canada, 710 Kalamazoo Building, Kalamazoo, Michigan.

Young Workers in 1952, annual report of the National Child Labor Committee, 419 Fourth Avenue, New York 16. Single copies free.

Tentative Progress Report on Planning for the Study of Preparation Programs in Educational Administration. Southern States Cooperative Program in Educational Administration, Nashville, Tennessee.

A Handbook for Colorado School Boards, a guide to policy and procedure. Colorado Association of School Boards, 326-C Norlin Library, University of Colorado, Boulder.

Electrical Demonstrations You Can Perform. Westinghouse Electric Corporation, 401 Liberty Avenue, P. O. Box 2278, Pittsburgh 30, Pennsylvania.

CED and Economic Research in College-Community Centers. Committee for Economic Development, 444 Madison Avenue, New York 22.

These Days Are Gone describes the purposes and work of the Joint Council on Economic Education, 444 Madison Avenue, New York 22.

Ohio, New Gains in Economic Education. Joint Council on Economic Education, 444 Madison Avenue, New York 22.

SE-125

3 **REASONS WHY**



LEAVITT SHOULD BE INCLUDED IN YOUR SEATING PLANS

1 Proper seating to fit your particular requirements — Leavitt makes a full and complete line of portable wood bleachers, steel understructure bleachers, stadium and telescoping interior bleachers.

2 Unsurpassed quality, design and workmanship—guarantee you safe, permanent, and long-lasting equipment.

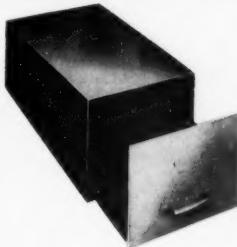
3 Experience—a pioneer in the field. Let our experienced seating engineering give you free advice and recommendations—never any obligation.

Write, phone or wire today for **FREE CATALOG and FULL INFORMATION**

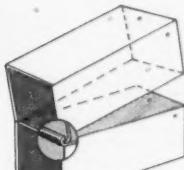
LEAVITT bleacher Co.

208-220 GRIGGS ST. • SINCE 1895 • URBANA, ILL.

STEEL STORAGE FILES



with Drawers that
DO NOT BIND be-
cause of Ball Bear-
ing Rollers



Sturdy, made of 24 gauge cold rolled steel, adaptable to storage of active or inactive records. No binding—drawers always free because each drawer rides on four ball bearing rollers.

Positive stacking features—both vertically and horizontally. Letter size files filled to capacity can be stacked 10 high without binding because of sturdy construction.

All standard sizes, in-
cluding card sizes and
microfilm. Write for full
information and price
list.

THE NATIONAL BOX & CAN CO.

Established 1913

4131 Broadway

Cleveland 27, Ohio

SE-118
**There's SAFETY in this key
provide locker**

SECURITY without headaches

... use
DUDLEY LOCKS



An exclusive with Dudley P-570—a Master Key that provides locker security without headaches. Emergency locker openings are quickly and easily made with this unique Dudley P-570 key, cut accurately by code only. It can not easily be duplicated by commercial locksmiths. This assures you of the utmost in locker security.

The RD-2 below, is another best-seller in the fine Dudley line.

Write for catalog and details of the Dudley Self-Financing Plan.

P-570
Master - Keyed
combination with the SAFE
Dudley key

RD-2
Rotating Dial
combination with Master-
Chart control



**DUDLEY LOCK
CORPORATION**

Dept. 219, Crystal Lake, Illinois

EVERYTHING FOR SCHOOLS!



COMPLETE EQUIPMENT AND SUPPLIES FOR SCHOOLS

• CHINA • GLASS • SILVER—Everything for the perfect table service!

• UTENSILS—A complete line of fine quality utensils! Aluminumware—Enamelware—Stainless Steel Ware—Woodenware—Wire Goods—Cleaning Supplies.

• KITCHEN EQUIPMENT—A complete line of Dishwashers—Glasswashers—Silver Burnishers—Peelers—Mixers—Slicers—Ranges and other Kitchen Machinery.

• DUPARQUET KITCHEN EQUIPMENT—the finest quality specially fabricated Sinks—Work Tables—Warmers—Steam Tables, etc.

• REFRIGERATION—The finest makes of Commercial high temperature and low temperature refrigerators. Walk-in and reach-in models, upright and chest types. DUPARQUET REFRIGERATORS manufactured for special requirements. Water Coolers—Ice Cream Cabinets.

• FURNITURE AND FURNISHINGS—A complete display of fine furniture—Floor Coverings—Linens and Decorative Accessories.

- A skilled Food Service Engineering Department!
- A skilled Decorating Department!
- 4 floors of stock for prompt service!

NATHAN STRAUS-DUPARQUET, INC.

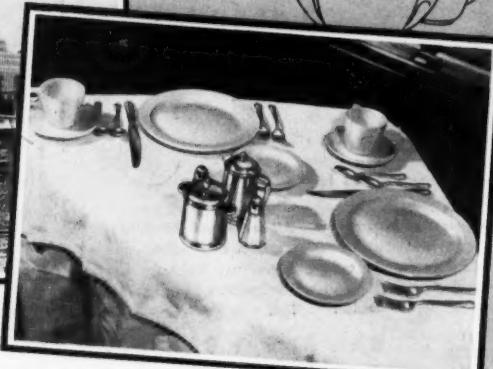
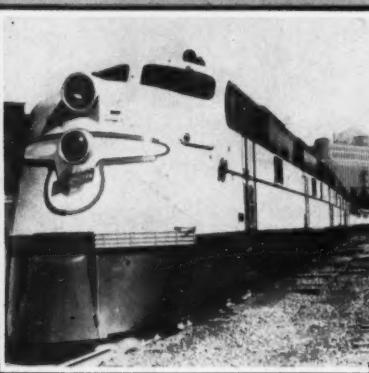
*Serving the Finest Hotels and Institutions for
More Than a Century*

33 East 17th St., Union Square North,
New York 3, N. Y.

Telephone: ALgonquin 4-3600

Boston • Chicago • Miami • Norwalk

a complete line without a break . . .



... that "highly satisfies"
**CHICAGO AND NORTH WESTERN
 RAILWAY SYSTEM'S "400's**

"... The North Western purchased several hundred pieces of Boontonware about two years ago and they have been in intensive use in the lunch counter cars of our "400" Streamliner fleet.

"Mr. J. C. Ryan, Superintendent of the railroad's Dining Car Department, says he is highly satisfied with the service obtained from these dishes. In the past two years, out of some 1400 pieces of Boontonware only about a dozen pieces have been broken."



Only 12 replacements necessary out of 1400 pieces in railway dining car service over 2 years. What a record! With Boontonware, you might even top it in your own particular food service operation.

And with all its break-resistance . . . still no sacrifice in style, color range, simple stacking, easy washing . . . all the things you want and need in dinnerware.

Mix or match: POWDER BLUE, GOLDEN YELLOW, CRANBERRY RED, TAWNY BUFF, SEA FOAM GREEN, STONE GRAY, and FOREST GREEN.

See your regular Supply House or write us for the name of your nearest Dealer

Boontonware
 fine dinnerware fashioned of **MELMAC®**



Boontonware complies with C.S. 173-50, the heavy-duty melamine dinnerware specification as developed by the trade and issued by U. S. Department of Commerce, and conforms with the simplified practice recommendations of the American Hospital Association.

BOONTON MOLDING COMPANY • BOONTON • N. J.



The lunchroom provides educational experiences in the social aspects of group eating.

Planning the School Lunchroom

by Orpha Mae Thomas

"Planning the School Lunchroom" is adapted from an article by Dr. Orpha Mae Thomas in the current edition of *The American School and University*. Since 1942 Dr. Thomas has taught institution management and served as assistant manager of the cafeteria at Teachers College, Columbia University. Work simplification is her specialty.

THE GUIDE for planning a school lunchroom must be based on purposes and aims of the school lunch. This includes the provision of appetizing hot lunches which are nutritionally adequate for growing youth at a cost which the majority of parents can afford to pay; and the provision of educational experiences in the social aspects of group eating, in the study of common foods and their preparation, in the introduction of new foods.

The keynote in planning school lunchrooms should be simplicity — adequate space, good equipment and proper layout. In keeping with all good design, the planning should be

functional. Since the cafeteria is used by a large group, the dining room should be adequate to comfortably seat the number who come to be served in any one shift. To reduce the cost of such space, the dining room area may be shared with other areas such as study hall, auditorium, gymnasium, or library.

Buy Good Equipment

Equipment purchased for the school lunchroom should be of good quality for several reasons. Since it is purchased with public funds in which all citizens have an interest, careful selection is necessary to make the choices



SCHOOL LUNCH

To reduce costs, the dining room can be shared with other areas. In this cafeteria-gym, tables and seating fold into the wall.

SE-69



the Emblem of Quality since 1875

FIRE ALARM SYSTEMS
for every type building



Non-Coded Fire Alarm Station



No. 2000
Unipact Bell

That dreaded word, "fire". Whether it's a school, hospital, or public building, a quick warning system is essential to keep the situation under control. Faraday Fire Alarm Stations, Control panels, Warning signals, Complete Systems are carefully manufactured to rigid engineering standards . . . your assurance of fool-proof dependability when the crucial moment arrives. Protect lives, keep property losses to a minimum with a Faraday System. Write us the details of your problem and we can offer you money-saving suggestions.

CONSOLIDATED BY:

SPERTI FARADAY INC. ADRIAN, MICH.

BELLS · BUZZERS · HORNS · CHIMES · VISUAL AND AUDIBLE PAGING DEVICES AND SYSTEMS

wise investments. Because the equipment is used to prepare five meals a week instead of fourteen or twenty-one meals as in commercial enterprises, and as it is used for only eight to ten months per year instead of twelve, the materials should be those which will resist deterioration such as corrosion or rust during these idle periods. A third reason for good equipment is that it makes for efficient work, thus reducing operational costs. Workers will also take pride in keeping good equipment in good condition.

Simplicity of the kitchen layout applies to both the number and nature of the pieces of equipment selected for the food service, and the arrangement of these pieces for the best flow of work.

Selecting Equipment

The number and nature of the pieces of equipment selected should be based on the following: the total number of persons to be served, the number scheduled to be served at any one period, the menu to be served, the amount of preparation to be done in the kitchen, the available labor supply and the cost of such labor, and the utilities available in the building in which the kitchen is to be located.

The School Menu

Let us first consider the menu to be served. The usual menu for school lunch is a plate lunch or complete luncheon, consisting of a main dish or sandwich, vegetables and/or fruits, bread, butter, milk and dessert. A more extensive menu includes several main dishes, several vegetables, and perhaps several salads and desserts. In any case, simple methods of prepa-

...TO SCHOOL LUNCH SUPERVISORS

Here's the answer
to **CENTRALIZED**
production
and
distribution
of hot foods



School budgets are taxed severely where food preparation equipment is duplicated in many different schools.

AerVoid Vacuum Insulated Hot Food, Soup and Liquid Carriers make practical the establishment of central control kitchens and the distribution of hot or cold foods in any quantities to individual schools any distance.

Low first cost. Little or no operating or maintenance cost . . . all-stainless steel **AerVoid**s are so durably built!

Experienced food consultants to help you work out city or rural school lunch feeding problems without cost or obligation to you.

WRITE FOR NEW CIRCULAR SE-153
"A FORWARD STEP IN SCHOOL FEEDING."



Hot Liquids

Vacuum Can Company

19 S. Hoyne Avenue • Chicago 12, Illinois

AERVOID Vacuum Insulated
Hot Food, Soup and Liquid Carriers

SE-74

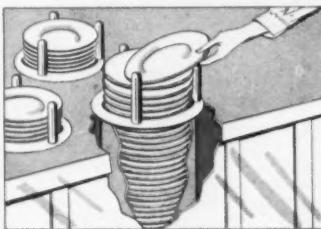
LEARN THE 3R'S OF EFFICIENT FOOD SERVICE

Rapid service



—AMF Lowerator Dispensers speed up service by automatically dispensing plates, glasses, trays and cups and saucers. As each piece is removed, another moves up to take its place . . . always at a convenient serving level. Dishes are always where they're wanted, when they're wanted.

Reduced breakage



—Large quantities of dishes are safely stored in AMF Lowerator Dispenser units. Loose open stacks are eliminated. Handling and rehandling are kept to a minimum—chipping and breakage are reduced.

Reliable sanitation



—China and glasses are taken from the dishwashing machine and placed directly into AMF Lowerator Dispensers. Units are easily and quickly refilled from the top—rehandling is eliminated, resulting in maximum sanitation.

Mobile Floor and In-Counter Models. Heated, Unheated and Refrigerated Units. Consult Your Kitchen Equipment Dealer or Write for Catalog.

AMF
LOWERATOR
DISPENSER
REG. U. S. PAT. OFF.

AMERICAN MACHINE & FOUNDRY COMPANY
485 Fifth Avenue, New York 17, N. Y.
Western Distributor—Dohrmann Commercial Co.

THE SYMBOL OF
Superlative Sanitation



Bradley Washfountains

School authorities, nurses and parents all agree on the desirability of sanitary wash fixtures. Architects, too, have recognized this requirement and as a result a big majority of schools erected during the past 20 years have installed Bradley Washfountains. This wide usage is a result of the superlative sanitary features, their economy of space and water consumption, and their convenience.

With foot-control, no faucets are needed, and contact is made only with the clean running spray of water. There is no collection of used water, the self-flushing bowl tends to this. Whether a few or 8

or 10 wash simultaneously, as soon as the last one leaves, the water flow is cut off immediately. Water can be tempered to suit.

If you are planning new schools, or modernizing present buildings you can easily replace out-of-date fixtures with Bradleys.

BRADLEY WASHFOUNTAIN CO.
2233 West Michigan Street
Milwaukee 1, Wisconsin

Distributed through
Plumbing Wholesalers



New Catalog
5204 mailed
on request.



SCHOOL LUNCH



Adequate space and good equipment are provided in the Community Consolidated School, Palatine, Illinois, designed by Perkins and Will.

ration are used, such as boiling, stewing, frying and baking. Elaborate methods of preparation, such as broiling, toasting, sautéing and pan frying require a great deal of labor and are not used for school lunches. Foods are prepared in large quantities rather than in individual orders as is required in commercial restaurants.

Hot Food Needs

The equipment needed to prepare hot food for these menus should include ranges with ovens, bake ovens, and, if possible, a steamer and a steam jacketed kettle. Broilers, toasters, and bains-marie used in hotels and commercial restaurants serving complicated menus are not needed in the school lunchroom. The bakery products served will be pies, cakes, cookies and the pudding type of desserts. Occasionally hot breads, such as muffins or biscuits, are prepared. The main supply of bread is usually bought from commercial bakeries, and elab-

HEINZ CHEFS—

ARE YOUR CHEFS' PARTNERS!

**Let Your Heinz Man Show You
How HEINZ Bulk Soups Can Help
You Boost Profit—Cut Costs!**

Heinz' experienced soup chefs are working for you—when you stock and serve Heinz Bulk Soups! They do all the cooking, slicing, dicing, etc.—in Heinz modern soup kitchens. As a result, your chefs are freed from the time-consuming fuss and muss of costly, old-fashioned soup preparation. They can devote their energies to other money-making menu items! Yes, and what's more, you're able to feature a greater variety of soups—14 in all—all delicious—and all Heinz!

◀ INSTITUTIONAL SIZE—51-OZ. TIN

Ask Your Heinz Man About

HEINZ SOUPS

You Know They're Good Because They're Heinz!

Mushroom • Bean • Beef Noodle • Beef With
Vegetables • Chicken Noodle • Chicken With Rice
Clam Chowder • Cream Of Chicken • Cream Of
Green Pea • Cream Of Tomato • Split Pea • Vegetable
Vegetable Without Meat • Causseme (Chicken)



NO! NO! NO!

**NO { Towels
Mess
Servicing**



**With the perfected, automatic
NATIONAL HAND DRYER
—dries hands completely
dry in 20 seconds!**

Eliminates the constantly mounting cost of paper towels or towel service—no storage problem, no filling of cabinets, no removal, cleaning and disposal time or attention. No time when clean, sanitary drying service is not available.

Do you really know how much your wash room service is costing you?

One fast-acting, tamper-proof NATIONAL HAND DRYER serves 1½ to 2 wash basins, pays for its cost from actual cash outlays in 12 to 18 months, gives quick, soothing drying service at the touch of a button, and is rapidly winning preference in hand drying because of its fast, pleasing action.



**NATIONAL HAIR DRYER
—dries hair completely dry
in 3 minutes!**

for average heads of hair. A completely hygienic method of drying under sanitary conditions; guards students' health, helps prevent colds. Eliminates untidy shower rooms, costly towel replacement and service. Quick and pleasing.

**NATIONAL DRYER SALES CORPORATION—
Dept. SE-3-2, 616 W. Adams St., Chicago 6.
Without obligation, send literature and cost sav-
ings information on National Hand Dryers
 National Hair Dryers.**

Name. _____ Title. _____
School Name. _____
Address. _____
City. _____ Zone. _____ State. _____

SCHOOL LUNCH

orate desserts are not within the money or labor budgets. Therefore it is not necessary to provide equipment for making these products.

The only beverage served with school lunches is, or should be, milk. This requires adequate refrigeration, but eliminates the necessity for batteries of coffee urns. The small amount of coffee and tea served to faculty patrons can be prepared in small vacuum-type coffee makers.

Location of Equipment

Several pieces of equipment can be used by several departments because each uses them for a short time each day. By locating these pieces where they are easily accessible to the several workers, mixers and slicers can be used by bakers, cooks, and salad and sandwich makers as needed. Since the mixers are used by the cooks and bakers more often, these should be located between these two workers' areas. Because a slicer is used more often by cooks and sandwich makers, it should be located between their working areas.

The serving counters for the complete lunches or limited choice can be much shorter than for commercial cafeterias which serve a wide selection. Also, rapid service at stated lunch periods make long holding periods unnecessary, so less counter space is needed.

China, Silver

The service of the school lunch menu calls for a limited amount of china and silverware. Dinner plates, smaller plates which can be used for salads, sandwiches or desserts, soup bowls and dessert dishes are the essential pieces of tableware. The silverware put out for any one day need be only that required for the menu, and is usually not more than three pieces. Milk is usually served in its original container and with straws. All this not only simplifies service of the meal, but simplifies the dishwashing as well.

The dishwashing load includes principally plates, dessert dishes, soup bowls, and silverware. Some glasses, cups and saucers may be used to serve teachers, but these will be few in number. Therefore the dishwash-

Protect and Project

2x2 SLIDES and FILM STRIPS with the brilliant, triple purpose



Filmatic projector

300 WATTS BLOWER COOLED

2x2 slides and film strips last longer with the GoldE FILMATIC—more brilliant projection, easier operation. Film capacity up to 350 frames.

Yes, lighten your teaching load with the GoldE FILMATIC—so simple, the youngest member of your class can operate.

See the FILMATIC—America's best projector buy: lightweight—all-over brilliance—exclusive rewinding (film strip)—vertical or horizontal—slide to film strip in a moment—equipped with 5" F:3.5 coated lens and Manumatic stacking or two-way carrier. Complete—(choice of carrier) and durable tweed-covered case, with lift-off cover. \$90.25

PROTECT and PROJECT 2x2 slides automatically



The GoldE Automatic Index Slide Changer shows 40 slides in all mounts, in sequence, skips, repeats, rotates, selects. Fingers never touch the slides. For All Film Types.

NEW LOW PRICES!
Complete with Index File \$22.50
GoldE Aluminum 2x2 Snap-in Binders with frames, glass and labels:
Box of 20 \$1.85
Box of 100 \$8.25

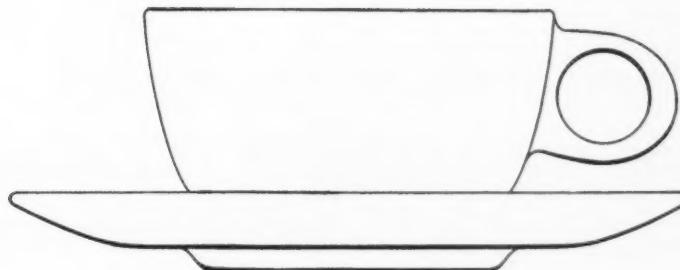
Write for free "Projector Gems" Booklet, Index System literature, name of nearest dealer.

GOLDE MFG. CO.



**Brightest Name
in Slide Projection**

4888 N. CLARK ST.
CHICAGO 46, ILLINOIS



stop cup staining before it starts!

a little extra care pays BIG extra savings with

MELMAC® dinnerware

Follow these six basic steps and your beautiful, break-resistant cups made of MELMAC melamine will keep their sparkle, stay new and stain-free through thousands of servings . . . and the low replacements you now enjoy will drop even lower.

- ❶ **SCRAPE AND PREFLUSH** as soon as possible after use
- ❷ **RACK OPENLY** for efficient washing, faster air-drying
- ❸ **WASH** in water 140°-160°F, with a top quality detergent in the concentration recommended by the manufacturer. The installation of an automatic feeder to control the detergent concentration is strongly recommended
- ❹ **RINSE**, allowing machine ample time to rinse thoroughly (usually 170°-190°F for at least 10 seconds)
- ❺ **LET STAND** in racks until dry

GET THOSE EXTRA SAVINGS. MAKE THE BEST USE OF YOUR MELMAC DINNERWARE. THE BREAK-RESISTANCE IS THERE. THE BEAUTY IS THERE. PROTECT THAT BEAUTY THROUGH THESE FEW SIMPLE PRECAUTIONS AND YOU'LL ENJOY A HIGH IN LOW REPLACEMENT COSTS.

... and at regular intervals a dip that licks staining before it starts:

❻ Use a discoloration-remover developed for this purpose (*do not use abrasives or scouring powder*), and follow the recommendations of suppliers of these cleansers, typical of which are these**

DIP-IT®—Economics Laboratory

M-E CLEANER®—Maid-Easy Cleansing Products Corporation

OZO®—Turco Products, Inc.

SAR-7®—Antiseptol Company

The method is simple . . . the results are sure . . . the long service-life is extended indefinitely . . . and the savings are multiplied over those you previously enjoyed with ordinary care of MELMAC dinnerware.

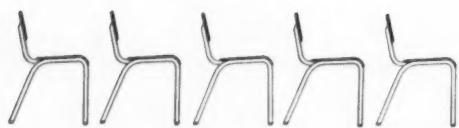
*T. M. Reg. U. S. Pat. Off.

**Similar compounds working on same principles will doubtless achieve same beneficial results.




AMERICAN CYANAMID COMPANY
PLASTICS DEPARTMENT
38D Rockefeller Plaza, New York 20, N.Y.

In Canada: North American Cyanamid Limited,
Royal Bank Building, Toronto, Ontario, Canada



from seating to stacking...in a minute flat!

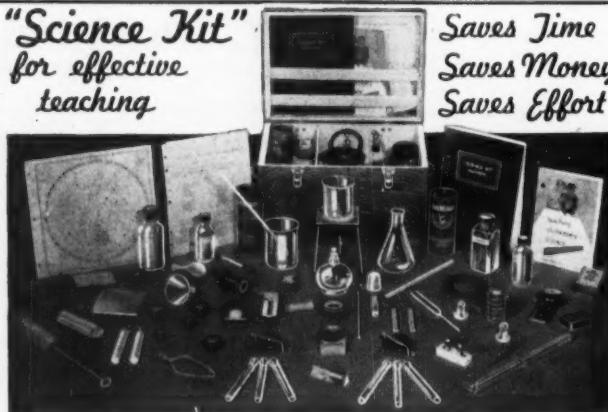
A complete line of modern chairs, tables, desks and cots—*based on the stacking principle!* Light yet sturdy, they allow maximum flexibility, are ideally suited to any schoolroom which serves varied groups or programs. *Write for complete catalog.*



school interiors co.

5 University Place, New York 3, N. Y.

"Science Kit" for effective teaching



**Saves Time
Saves Money
Saves Effort**

"SCIENCE KIT"—the original, complete portable laboratory, containing over 80 pieces of quality apparatus essential to interesting science teaching. Teacher's Manual covers 14 Units of Experiences; Manual of Astronomy; Star Chart; Blough and Blackwood's *Teaching Elementary Science*.

- Simple to use—experiments **CLEARLY** explained
- Students see scientific principles in action
- Solves housing problem for apparatus
- Saves TIME—MONEY—EFFORT
- Correlates with any text
- Replacement service

"SCIENCE KIT" is successfully used in over 25,000 schools in every State. Here's the answer to your problem of elementary science equipment! **IMMEDIATE DELIVERY.**

Write For
Circular

"Science Kit"

Box 69
Tonawanda, New York

Price \$36.00
F.O.B. Tonawanda

SCHOOL LUNCH

ing can be done easily with one dishwasher; a separate glasswashing machine is not necessary.

Plan for Efficiency and Economy

The layout or arrangement of the equipment in the kitchen is of prime importance, as this determines the flow of work and the distances raw foods, finished products, supplies, and dishes must be carried. The most desirable arrangement is one which keeps this transportation at a minimum. The aim is to *simplify* and *shorten* each route for each item. The space allotted or the physical features of the building may make the ideal arrangement impossible. However, the best arrangement under a given set of conditions will make the flow of traffic as direct as possible and will avoid cross traffic and retracing of steps.

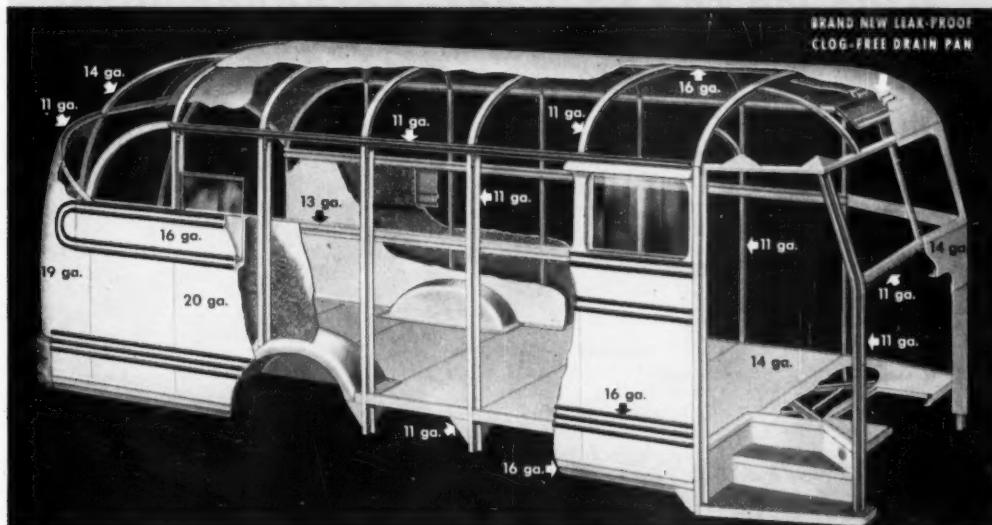
Consultant Helps

Since the kitchen layout determines the amount of labor required, and this will affect the daily operational cost of the lunchroom, the problem merits the concern of the school administrators. The plan devised should be the result of the combined efforts of the school administrator, the school lunch manager or supervisor, the school architect, and the equipment engineer, for each has knowledge to contribute. When planning new installations or a change in existing facilities, it may be desirable to obtain the assistance of a qualified consultant. This way the initial cost of unnecessary and little-used equipment can be saved. At the same time, a more efficient layout will result in continued daily savings.

Help Fill Needs

Thus adequate space with good equipment for preparation and service, when arranged for efficient operation, will help the school lunchroom managers and workers carry out the aim of the school administrators: to provide appetizing hot lunches which are nutritionally adequate at a cost which the majority of parents can afford to pay. In addition, the students can have educational experiences in social manners and learn about foods and methods of preparation not used in their family group.

**Wayne IS... BY FAR!... THE
HEAVIEST, STRONGEST BODY
IN THE SCHOOL BUS FIELD!**



Before you actually **BUY
any school bus body...
ASK THESE QUESTIONS:**

- How strong are the sideposts? (Wayne's are **TWICE** ordinary post thickness!)
- What is the combined shoulder-line steel thickness? (Wayne's is **over TWICE** that of other buses!)
- How many guard rails does it have? (Wayne has **12** guard-rail profiles on both sides on most models—never less than **9!**)
- How strong are the guard rails? (Most of Wayne's are **13-gauge**—never less than **16-gauge!**)
- How strong is the gusset-plate steel? (Wayne's is **11-gauge!**)
- Is it Bonderized against rust? (Only Wayne is **Bonderized!**)
- Are the seats dangerously fastened to the wall? (Wayne's are *safely mounted* **AWAY** from the wall—on 4 legs, not just 2!)
- Is it strong and flexible—through-lock-BOLTED like the chassis itself—built to **FLEX WITH** the flexing chassis—rather than rigidly fastened with welds and rivets which pull loose and require expensive repair with acetylene torches and rivet guns? (Only Wayne has the strength and flexibility of chassis-matching through-lock-BOLTING!)
- How do the steel-gauges compare with Wayne at **every** point? (Wayne INVITES comparison!)

Free: Write for colorful new literature—in full detail!

WAYNE WORKS, INC.
RICHMOND, INDIANA, U.S.A.
World's Largest and Oldest Manufacturer
of School Bus Bodies—EXCLUSIVELY!





For greater safety,
handling ease, and adaptability...

Give me the Polisher-Scrubber with **THESE EXTRAS!**



A 600 Series
Finnell. Four
sizes: 13, 15,
18, and 21".

The combination of extras at right not only wins the appreciation of maintenance men, but appeals to thrifty, safety-minded management as well. In operating a 600 Series Finnell, no effort is required to hold the feather-touch safety switch to 'on' position. And the switch works with either hand from either side of handle! When grasp is released, the switch automatically disengages and the machine stops. Brush-propelled, it glides over the floor with virtually effortless guidance. True balance is attained through proper distribution of weight per square inch of brush surface in relation to thrust and brush speed. Indicative of the quality construction of a 600 Series Finnell are: G. E. Drip-Proof Capacitor Motor (furnishes abundant power) . . . worm gear of special phosphorus gear bronze, meshing with worm of hardened, ground, and polished gear steel . . . New Departure Ball Bearings. Although essentially a polisher-scrubber, with suitable accessories the machine can also be used to apply wax, dry-scrub, steel-wool, sand, and grind.

Another of the extras offered by Finnell is nation-wide service! There's a Finnell Floor Specialist and Engineer near you to help solve your particular problems . . . to train your operators in the proper use of Finnell Equipment . . . and to make periodic check-ups. It's also good to know that Finnell makes everything for floor care! For demonstration, consultation, or literature, phone or write nearest **Finnell Branch** or **Finnell System, Inc.**, 3102 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

FINNELL SYSTEM, INC.

Originators of Power Scrubbing and Polishing Machines

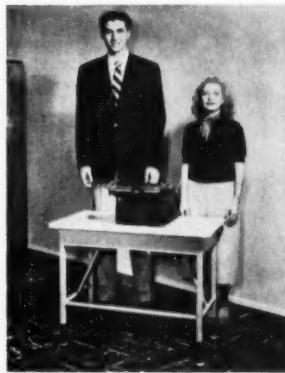


BRANCHES
IN ALL
PRINCIPAL
CITIES

School Equipment

News

Typing Table SE-201 Adjusts from 25½" to 33" in Height



The Adjustamatic is a compact, durable steel typing table which allows a full adjustment of the entire top surface from 25½" to 33" in height. The operating mechanism is fully enclosed, is foolproof, tamper-proof, and automatically locks at any set position. The table is particularly desirable for commercial classes in schools where proper, rapid adjustment in height promotes faster and more accurate work, eliminates student fatigue, and cuts maintenance and repair costs due to its all-welded steel construction.

The size of the top is 20" x 36".

INTERSTATE ENGINEERING CORP., 2250 E. Imperial Highway, El Segundo, Calif.

Cement Enamel SE-202 Is Waterproof, Fireproof, Easily Washed

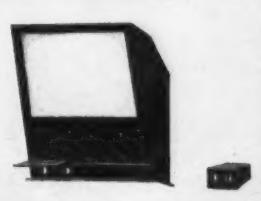
Cement Enamel is the name of a new wall finish for new interior walls, or old painted walls, which gives a hard glazed surface. The texture breaks up the light, thus eliminating glare and, in addition, the surface is washable, sanitary, and durable. The

colors, which range from soft pastels to deep, rich shades, are prepared from the finest oxide color pigments, contain no oil, and are guaranteed against fading.

This product can also be applied to any masonry wall, including all standard building blocks, concrete, brick, or plaster.

CEMENT ENAMEL OF MICHIGAN, INC., 3035 E. Grand Blvd., Detroit 2, Mich.

School Television SE-203 Big 40" Screen for Group Viewing



The Motiograph-Trad television equipment for classrooms and auditoriums delivers a peak performance on reception of programs telecast by local and area TV stations, national networks, and educational TV outlets.

It provides big 40" pictures that permit comfortable viewing by all students in the largest rooms. The image possesses fine detail and definition.

MOTIOPHOTOGRAPH, INC., 4432 W. Lake St., Chicago 24, Ill.

Cold Cathode Fixture SE-204 Features Low Brightness, Little Glare

Low brightness, little reflected glare, and absence of shadows makes the new Cutler Mirac-O-Lite Cold Cathode fluorescent lighting fixture particularly suitable for classroom use.

A four-tube, bent-line fixture, hanging eight foot overall and 17" across the body, the Cutler unit is also available in two-lamp and six-lamp designs. Easy to maintain, the fixtures are serviced merely by dropping the bottom lid and changing the tubes.

CUTLER LIGHT MFG. CO., 2026 N. 22 St., Philadelphia 21, Pa.

Folding Chair SE-205 In New Tablet Arm Model



The new Norcor No. 362 Folding Tablet Arm Chair is a Y-type chair of strong tubular steel construction with a comfortable, oversized, form-fitting plywood seat and deeply curved steel backrest.

The Tablet Arm is made from $\frac{5}{8}$ " resin-bonded plywood and is attached in such a way that it automatically folds against the chair as the seat is raised, requiring only one easy motion. When folded, the chair is very compact and easily stacked for storage.

The Norcor 362 is designed so that it has a minimum of joints, links, or hinges to create trouble. It is self-leveling and designed not to collapse.

Available in a pleasing taupe finish with wood parts in either natural or walnut finish.

NORCOR MFG. CO., Green Bay, Wis.

(Continued on page 124)

SE-216

Filmstrip Wall File

Compact System Files 90 Filmstrips

To file filmstrips as easily as placing a book on a bookshelf, a filmstrip wall-file has been designed by the Jack C. Coffey Co. It provides a convenient place to keep filmstrips out where they can be seen by the teacher. The filmstrips are filed in an organized manner for easy finding and filing.

The wall-file hangs securely on the wall, using two key-hole type hangers. There are individual key-numbered compartments for 90 filmstrips. Additional units can be bolted vertically or horizontally to the unit.

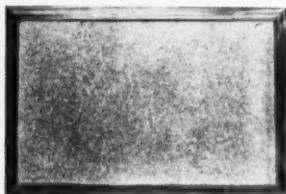


JACK COFFEY Co., 1124 Greenleaf,
Wilmette, Ill.

SE-217

Cork Bulletin Board

In Green Shade to Match Chalkboards



The Corkola bulletin board is made of Litegreen cork instead of the usual tan cork. Litegreen is the scientifically selected color deemed most agreeable to the eye. It harmonizes perfectly with the Litegreen chalkboards made by Beckley-Cardy Co.

The Litegreen Peerless Corkola material is a cork composition, $\frac{1}{8}$ " thick, bonded to $\frac{3}{8}$ " fiber board backing. Because of this rigidity it can be nailed to studding or mounted over rough masonry walls with no fear of cracking which is so often found in the fabric backed linoleum types of bulletin board material.

This material is available in sheets 4' wide and up to 12' long as well as in made-up portable bulletin boards.

BECKLEY-CARDY Co., 1632 S. Indiana Ave., Chicago, Ill.

SE-218

Torque-Limiting Wrench Has Automatic Release

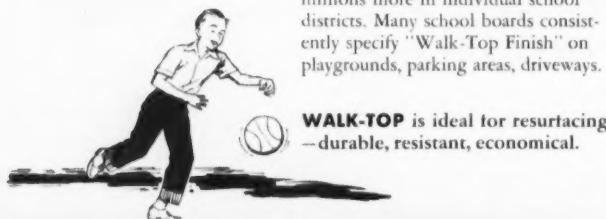
Design of a Proto precision torque-limiting wrench without the usual external indicating devices has been announced by Plumb Tool Co. It is suitable for nut and bolt torquing.

The new Proto torque wrench differs from most conventional types in four basic respects. First, it is a torque-limiting device (releases automatically at proper setting), and not a torque-indicating device (requiring dials, pointers, scales, sound indicators, etc.). It employs a fully enclosed precision spring under compression as the principal torque-controlling element. It uses an accurate micrometer-type adjustment. Models with a built-in reversible ratchet head are available that do the work of both a ratchet and torque wrench.

The new design is accurate, versatile, easy to use, safe, rugged, and much faster than types with indicating devices.

PLUMB TOOL Co., 2209 Santa Fe Ave., Los Angeles, Calif.

**Bitumuls Engineers
design the
smoothest
playgrounds
your school can buy**



WALK-TOP is ideal for resurfacing
—durable, resistant, economical.



**AMERICAN
Bitumuls & Asphalt
COMPANY**

200 BUSH STREET
SAN FRANCISCO 4, CALIFORNIA

E. Providence 14, R. I. Perth Amboy, N. J. Baltimore 3, Md. Mobile, Ala. Columbus 15, Ohio Tucson, Arizona Seattle, Wash.
Baton Rouge 2, La. St. Louis 17, Mo. Inglewood, Calif. Oakland 1, Calif. Portland 7, Ore. Washington 6, D. C. San Juan 23, P. R.



THERE AND BACK WITH *Oneida* SAFETY



**"A CRADLE OF STEEL
FROM WHEEL TO WHEEL"**

SEE US AT CONVENTION BOOTHS:
1120-21-22-23 1221-23
American Ass'n. of School Administrators
ATLANTIC CITY FEB. 14-19

SCHOOL BUS SALES DIVISION

ONEIDA PRODUCTS CORPORATION

CANASTOTA, NEW YORK



It's a great comfort for parents and school officials to know their boys and girls can travel to and from school with Oneida Safety—protected by "A Cradle of Steel From Wheel to Wheel."

The enviable road record of Oneida Safety School Bus Bodies throughout America testifies to the fact that Oneida Safety means greater comfort, longer life and lower passenger-mile cost, too!

Oneida Safety costs no more! Convince yourself—compare Oneida—feature for feature, quality and price—with any other school bus body. But government quarterly steel allotments make it imperative for School Boards to place their orders early!

Oneida Safety is Endurance-Built. Demand it on the chassis of your choice.

There can be no compromise with safety. Dollars saved won't save lives!

Specify Oneida Always!
America's Finest School Bus Body

FOR YOUR CONVENIENCE

School Bus Sales Division
Oneida Products Corporation, Canastota, N. Y.
Please send me the complete Oneida Safety School Bus Body story.

Name _____

Address _____

City _____ Zone _____ State _____

BB-3-63

Floor Wax

SE-206

Has Anti-Slip Qualities

Triple Service Floor Wax is designed to give optimum performance in all respects for low-cost floor care. It is neither tacky or gummy, has unusual self-leveling qualities, and dries in less than twenty minutes to a brilliant, transparent shine.

The wax is easy to remove yet it is water resistant within one hour after application.

THE R. M. HOLLINGSHEAD CORP., Industrial Div., 840 Cooper St., Camden 2, N. J.

Dishwasher Booster SE-207

Assures 180° Rinse Water

The Universal Model 180° Gas Fired Final Rinse Water Booster Heater was especially designed to be factory installed on Universal Models H, U, HD, HDC, M, E, S and on Models O, Y, K, J-2, R and MM by provided a controlled final rinse.

This low cost compact, efficient booster unit will mount under the dishtable. Where special conditions do not permit under-the-dishtable mounting, the dishwashing machine and booster will be furnished separately, but water and gas connections will be provided so that the plumber can connect short lines of tubing for final connections on the job.

For fullest operating efficiency and to provide ample 180 degree final rinse water, a water supply pre-heated to at least 140 degrees must be provided.

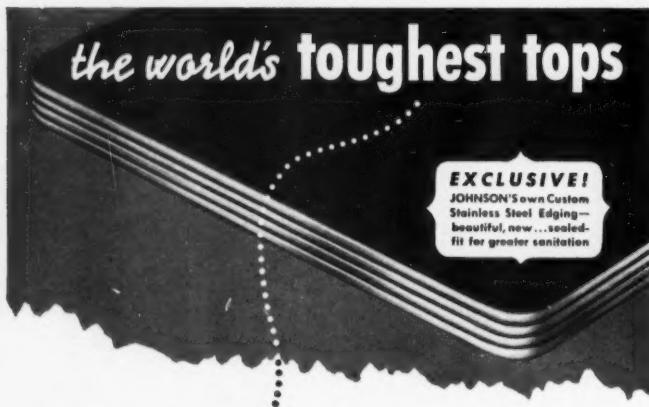
UNIVERSAL DISHWASHING MACHINERY CO., 50 Windsor Pl., Nutley, N. J.

SE-208

Transfer File Cases

Feature Ball Bearing Rollers

SE-41



they're Johnson Super-Bonded*



Only JOHNSON makes the Super-Bonded Top. The secret of their toughness is an exclusive lamination process that banishes high and low spots in the surface, plus full 9-ply hard-wood construction, bonded with a genuine Formica backing sheet that defies warpage. And "Super-Bonded" JOHNSON Tops give these important advantages—longer wear, super smoothness, beauty, sanitation and complete safety from cigarette burns and alcohol stains. Specify the best—insist on JOHNSON Super Bonded quality. It costs no more than ordinary tops.

Whatever you require in Tops—JOHNSON is equipped to produce to your exact specifications:

TABLE TOPS • COUNTER TOPS • BAR TOPS
FURNITURE TOPS • FOUNTAIN COUNTERS
COUNTER PANELS • WAINSCOTING • BAR COUNTERS
HOTEL FURNITURE TOPS • KITCHEN TOPS

FREE!

Write for descriptive literature, including Formica samples. Ask for the name of your local JOHNSON Dealer.

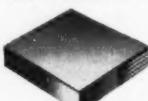
Johnson
PLASTIC TOPS, INC.

69 North Street, Elgin 7, Illinois

2 other edge types



Another popular design—available in Stainless Steel or Bronze.



Formica Soft Edge—not 9-ply core—applied by the improved Johnson method.

CHOICE OF 30 SMART COLORS

Choose from a wide range of plain, patterned and wood grain colors in Formica. Available also in other quality, durable materials.

SE-209

School Bus

For Transporting Student Groups



The new bus shown above is a Standard Flexible Visicoach manufactured by The Flexible Co. It has been designed for transporting student groups such as football and basketball teams, band, student council, etc.

THE FLEXIBLE CO., Loudonville, Ohio.

THE SCHOOL EXECUTIVE

presto change-o

If you're *not* using Presto discs at present, then it's time for a change. The reason, in one word . . . quality! From the meticulous preparation of the aluminum base in the Presto plant to the final play-back in the studio, quality is the byword . . . your assurance of consistent performance, unmatched fidelity of reproduction, long service. That's why Presto is the proven leader in the professional disc field . . . a leader that merits your consideration when you decide that it's time for a change . . . right now.



PRESTO
RECORDING CORPORATION
Paramus, New Jersey

Export Division: 25 Warren Street, New York 7, N. Y.

Canadian Division: Walter P. Downs, Ltd.,
Dominion Square Bldg., Montreal

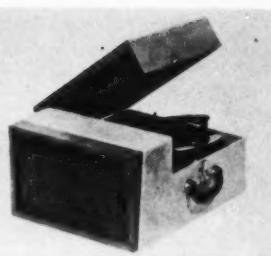
WORLD'S LARGEST MANUFACTURER OF PRECISION RECORDING EQUIPMENT AND DISCS

Transcription Player SE-210

1953 Model Has Improved Tone Quality

The new 1953 Model 11AJ Automatic Portable features a major advance in tone quality achieved by employing the 4-watt amplifier and the 8" speaker of the 6U Califone model. The new model is equipped with the latest Webster changer and has Sleepwatch complete automatic shutoff of changer and amplifier.

An inclined baffle panel across the width of the two-tone case is partly



responsible for the exceptional tone quality of the new players. The mo-

dern appearance of the Califone unit is enhanced by a protective shadow box surrounding the baffle. An output jack for external speaker or headphones is provided.

CALIFONE CORP., 1041 N. Sycamore Ave., Hollywood 38, Calif.

SE-211

Drawing Table

Built to Stand Abuse



The Tolerton Co. has developed a new drawing table for school use. Known as Tolco Model TWD, the table is made of choice flat grain hardwood and is constructed to withstand maximum abuse.

The precision-built unit features an adjustable, hard maple laminated top built by the Tolco electronic gluing process. A cabinet with compartments 2" by 3 1/4" provides ample storage space for individual drawing boards. A drawer 5" by 21 1/2" is provided for drawing materials.

THE TOLERTON CO., Freedom Ave., Alliance, Ohio.

SE-212

Junior Microfilmer

May Be Rented on Monthly Basis

Eight millimeter microfilming on 16mm film is now available in the Junior line of microfilmers made by Eastman Kodak Co. The new Recordak microfilmer, Model JD, operates like the two other models in the junior line and is similar in appearance. It microfilms documents at a reduction ratio of 36 to 1, as compared to lower reduction rates available in other models. This high ratio of reduction and a unique new arrangement of twin lenses, result in a double row of images on 16mm film. Small documents can be photographed so that the front and back images appear side by side on the film.

EASTMAN KODAK CO., Editorial Service Bureau, Rochester 4, N. Y.

Seal-O-San Cuts Maintenance and Refinishing Costs for Us



Bodine Studio Photos



M. L. Knapp, School Supt.
Michigan City, Indiana

"We specified SEAL-O-SAN® in the new Central School"

SAYS *M. L. Knapp*

SEAL-O-SAN has solved the problem of wood floor protection and maintenance for the Michigan City, Indiana, school system. Mr. M. L. Knapp, superintendent, states, "We have been using the products of Huntington Laboratories for years. We use Seal-O-San on all gym floors and many classroom floors. We have found that it lengthens the life of the wood floors as well as reduces application and maintenance cost."

Many institutions across the land are looking for a way to hold down rising maintenance costs. Seal-O-San is the perfect answer for wood floors because it is inexpensive to apply and maintain. It's the ideal surface for all wood floors because it's slip-proof, glareless and resists wear. Let us demonstrate its money saving qualities to you.

THE NEW CENTRAL SCHOOL
USES SEAL-O-SAN ON ALL
WOOD FLOORS



SEND "101 HINTS ON
BETTER FLOOR CARE"



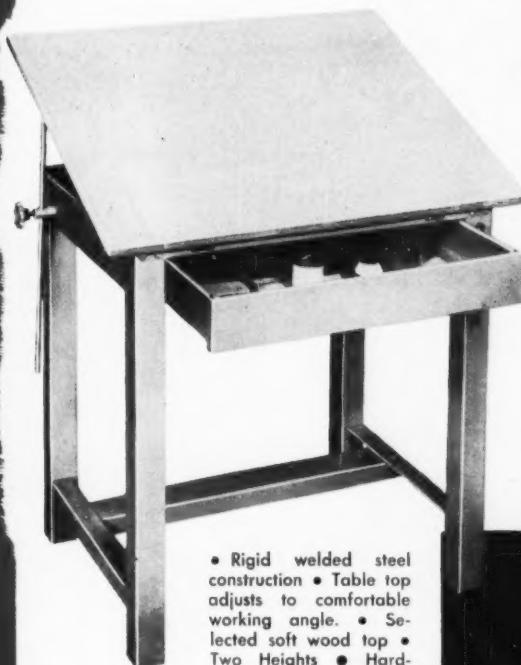
FREE

NAME _____
ADDRESS _____

**Huntington
Laboratories INC.**

HUNTINGTON, IND. TORONTO, CANADA

*how to set up an art dept.
you can forget about*



with STACOR LIFETIME STEEL EQUIPMENT

- **ONE Installation**
- **No Costly Repairs**
- **No Constant Replacements**
- **No Continuous Maintenance**

School Equipment must be rugged to take the daily wear and tear. STACOR LifeTime Steel Construction guarantees that generations of students will work and study without costly replacements or repairs. Here's durable construction . . . Here's rugged reliability . . . Here's economy that can't be duplicated, in Stacor Equipment!

- Rigid welded steel construction
- Table top adjusts to comfortable working angle.
- Selected soft wood top
- Two Heights
- Hardbaked grey hammertone enamel finish
- 4 Board Sizes

STACOR STAKMASTER Life-Time Steel Flat-Drawer CABINETS



- Precision built
- A neat, compact storage unit
- Stores and protects bulky art work
- Keeps paper from curling
- Four and five drawer sections
- Heavy gauge steel welded to form
- Smooth rolling ball bearing drawers
- All standard sizes
- Ideal for school use

STACOR Life-Time Steel TRIPOD TABLE EASEL



- Back leg adjusts to any angle
- Adjustable canvas rests
- Compact for carrying
- Non-skid rubber feet

STACOR Life-Time Steel TABORETS



- Two drawers
- Large cabinet section with door
- Heavy gauge steel, welded to form
- Recessed base or with casters for mobility

**Send for Catalog
Sheets, Today!**

STACOR 4-Post Life-Time Steel DRAFTING TABLES



- Designed specially for engineering classrooms
- Heavy gauge steel base
- Kiln-dried Soft Wood Adjustable Top
- Grey Hardbaked Enamel
- Shallow & Tool Drawers with Tool tray, lock and keys

DEALER INQUIRIES INVITED

STACOR EQUIPMENT CO.

475 Troy Ave. • Brooklyn 3, N. Y. • HYacinth 2-4148

90° Spectrometer SE-213

For X-Ray Analysis

A new Norelco 90-degree Geiger-counter X-ray Spectrometer provides at minimum cost a powerful analysis tool for use in research and educational fields. Designed to provide a full standard range of operation, the new instrument employs a long-life air-cooled X-ray tube and a goniometer having a radius of 130 millimeters. Angular range is minus 10° to plus 90°. Angles can be read directly from a dial or from a strip

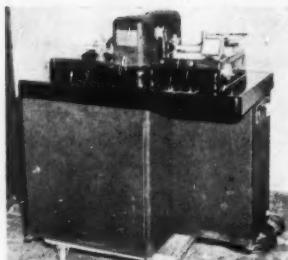


chart. The angle can be varied quickly by a manual drive or by employing

the incorporated motor drive. The Geiger-counter position is continuously readable to 0.01 degrees over the full range.

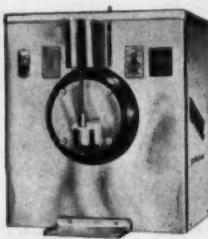
The high output X-ray generator provides fixed operation at 35 KvP at 6Ma and operates on 200-240 volts, 50 or 60 cycles. X-ray generator is self-rectified for simplicity and low tube replacement cost.

NORTH AMERICAN PHILIPS CO., INC., 750 S. Fulton Ave., Mt. Vernon, N. Y.

SE-214

Continuous Freezer

Is Basic Unit



The Model 1-190 automatic continuous freezer is the basic unit around which Sweden Freezer Mfg. Co. has built its automatic soda fountain system, a type of operation that shifts all handling of fountain items over to soft-serv products drawn directly from the machine. A convenient foot switch which controls admission of fresh mix into the cylinder in proportion to the product drawn, permits complete hand-free serving. The model 1-190 combination includes a soft-serv freezer which turns out a stiff consistency curl-top product suitable for all fountain dishes from sundaes and a la modes to floats, and the M1-190 which turns out complete milkshakes 6 to 8 times faster than the dipping method.

SWEDEN FREEZER MFG. CO., 3401-17th Ave., W., Seattle 99, Wash.

SE-215

Aluminum Sand Urns

For Lobbies, Corridors

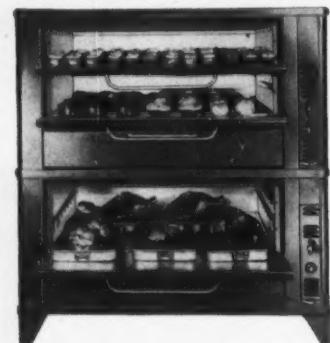
Sand urns in a new series of striking modern designs are being used in such institutions as New York University and the University of Wisconsin. Over the cylindrical aluminum shells are placed bands of brass or bronze in varying widths.

LAWRENCE METAL PRODUCTS CO., 79 Walker St., New York, N. Y.

SE-45

BLODGETT FLEXIBILITY PROVIDES MENU VARIETY

You can roast, bake and do general oven cookery in a Blodgett oven because of its flexibility and capacity. Each section is separately controlled for proper heat. Foods requiring different temperatures are cooked in different decks at the same time; meat might be roasted in one section at 300°F, baking done in another at 425°F, and general oven cookery in still another at 350°F. A Blodgett is continually producing for you because it can take care of as much as 70% of the cooked food items on your menu.



Blodgett makes ovens from its "Basic Three" design which provides the units to make 24 models.

THE G. S. CO., INC.

50 LAKESIDE AVE., BURLINGTON, VERMONT

When you design your new school or remodel your present building to increase capacity... Make space serve double duty

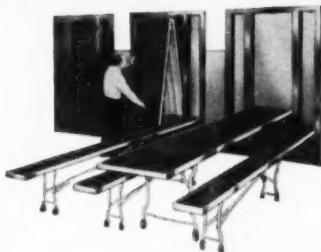
SCHIEBER NOW OFFERS
FOLDING TABLES and BENCHES
IN 2 STYLES

Choose the one that best suits your budget
and special requirements

ALL-STEEL CONSTRUCTION

In-wall

RIGIDLY ATTACHED TO WALL POCKETS



Here is genuine quality that has stood the test of time. Since 1937, more than 500 architects have specified thousands of these units in schools from coast to coast. With full knowledge of the rugged use they receive Schieber puts into their construction the best in workmanship and materials. Sound policy? Schieber IN-WALL users have no service problem.

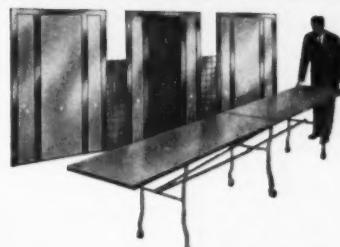
Unless you foresee the need of detaching tables and benches from the wall, specify IN-WALL and get the extra rigidity and quality it offers as compared with detachable units.



PLYWOOD TOPS—STEEL LEGS

Port-a-Fold

DETACHABLE FROM WALL POCKETS



This is a low cost, plywood top, version of IN-WALL, yet many of the important quality features of IN-WALL are incorporated in its design. With 15 years experience building folding tables and benches, Schieber knows exactly where strength is needed. No castings are used in Port-A-Fold and reinforcements are provided where necessary to absorb the abuse of daily operation.

If conditions require various seating arrangements or your budget is restricted, specify this unit.

If you are planning a new school or modernization of an existing building, consult SWEET'S file or write for these two catalogs and get complete details on both Schieber units. Then choose the type that best suits your needs.

SCHIEBER
SALES COMPANY
DETROIT 23, MICHIGAN

a name that
has always stood
for highest quality
in folding table
and bench
equipment.

Automatic Fraction SE-239 Collector

For All Flowing Liquids

Laboratories report unattended fraction collection is now possible with a new automatic fraction collector. Results of experiments demonstrate that this automatic collector provides complete accuracy with all flowing liquids and eliminates time-consuming manual collection. An interval timer indexes the reel and stops each tube under the dispenser for the desired interval pre-set on the



timer to control the volume dispensed. The reel has 64 positions in its circumference and is designed for holding

tubes, bottles or micro centrifuge cones. Optional diverter arm provides for dispensing to all three rows at one setting. Other accessories are available with this equipment.

MICROCHEMICAL SPECIALTIES CO.,
1834 University Ave., Berkeley, Calif.

Scintillation Detector SE-240

For Efficient Gamma-Ray Counting



A new scintillation detector, Model DS-1, is provided with a thallium-activated sodium iodide crystal and has a plateau length of approximately 200 volts. With the external directional shield in place, efficiencies of 33% or greater are obtainable using cobalt 60, and 40% or greater using Iodine 131. Model DS-1 detector is equipped with a removable directional shield, and has a built-in pre-amplifier which provides an output pulse in excess of one-quarter volt, making its use possible at the G-M input of any scaler or count-rate meter.

NUCLEAR INSTRUMENT & CHEMICAL CORP., 229 W. Erie St., Chicago 10, Ill.

**holding the school-budget line
WITH SOLAR
SELF-CLOSING
WASTE RECEPTACLES**

School Boards are naturally interested in all things that will improve their schools. After consideration of proposed improvements, the budget is the factor in the purchase of new equipment. The Solar line of self-closing waste receptacles "belongs" within that budget.

The Solar advantages are many and the cost is low, considering the importance of sanitation and fire prevention in today's schools. A Solar Receptacle is practical; it has an all-steel body and free-swinging, self-closing top that guarantees neater, cleaner and safer premises. A "must" within every school.

To give you a clearer picture of the complete line of Solar Receptacles we invite you to write for additional information.

SOLAR-STURGES Mfg. Div.
Pressed Steel Car Company, Inc., Melrose Park, Illinois

Football Uniform Bag SE-241 Made of Strong Duck

The Model T-200 Team Bag is designed to hold a complete football uniform. It is 15" in diameter and 25" long, with a double fold handle reinforcing the entire circumference of the bag. There is a choice of tan or gray.

Made of vylan duck, which is mildew-proof, water-proof, plastic coated for extra life, and is washable inside and out. The leather tab is double sewn and riveted for extra strength. The bag is equipped with a full-length zipper with end seams vinyl welted. The zipper edge is also vinyl bound.

The bag can be stenciled, and is furnished with a leather name holder. CAN-PRO CORP., Fond du Lac, Wis.

QUALITY CONTROLLED



This modern classroom in a new Houston, Texas school uses Matico in colorful designs to make the room more cheerful.



The main corridor of the Houston, Texas, school, Matico assures long-lasting wear under heavy traffic conditions such as are found in schools.

MATICO earns *A+* (for excellence)

IN HUNDREDS OF MODERN SCHOOLS

FLOORING

<i>A+</i>	quality
<i>A+</i>	economy
<i>A+</i>	durability
<i>A+</i>	resilience
<i>A+</i>	rich colors

REPORT

Outstanding quality — carefully guarded throughout manufacture — enables you to specify Matico Asphalt Tile with full confidence.

Matico is the most economical type of luxury flooring available today. It costs less initially — saves on maintenance, as well.

Even under heavy traffic conditions in schools, Matico assures long-lasting wear.

Unusual resilience makes Matico comfortable underfoot — helps prevent fatigue. And Matico helps reduce noise, too.

Matico's line of rich, clear colors — including 10 new Confetti patterns — offers a wide variety of designs and color combinations to make schools more cheerful.

Be sure to consider Matico for your next school project. Matico's impressive advantages assure complete satisfaction even under the most trying conditions.

Write today for free color chart and full details.

Dept. 15-2

MASTIC TILE CORPORATION OF AMERICA

Member: Asphalt Tile Institute

Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.



St. Raymond Elementary School, Joliet, Ill., features colorful, easy-to-clean Matico Asphalt Tile Floors.

REPLACEMENT OR REFUND OF MONEY
Guaranteed by
Good Housekeeping
IF NOT AS ADVERTISED THEREIN



precision
tested

to conform to Federal
specifications for
FLATNESS
INDENTATION
BURLING
IMPACT

Calculator

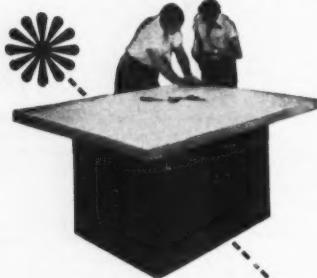
SE-219

For Office, Field Calculations

The Curta Calculator combines the versatility of a large desk calculator with the portability of a slide rule. Each part is precision engineered, not stamped out. It adds, subtracts, multiplies, divides, cubes, and gives square roots. It is suitable for invoicing, figuring interest, weight and measure conversions, cost accounting, allocating and research in engineering computations.

It fits easily in the hand and weighs but 8 oz.

CURTA CALCULATOR CO., 3851 W. Madison St., Chicago 24, Ill.



TOLCO FOUR STUDENT WOODWORKING BENCH

Model TM-12 with $2\frac{1}{4}$ " hard maple, edge grained, electronically glued top $54'' \times 64''$. Heavy metal base with 12 lockers.

There is a precision built TOLCO product for your shop or art department. Write for complete information.



A new shop equipped with TOLCO TM-12 four place benches and TM-based Wall Benches.

THE TOLERTON COMPANY

264 N. Freedom Avenue — ALLIANCE, Ohio
Established 1894 — Our 58th Year

Indexing Centers

SE-220

For Small Precision Work

South Bend Lathe is now marketing their new Indexing Centers. This sturdily built device is designed for small precision work and can take stock up to 5" in diameter and 6" in length.

Ideal for dividing operations such as machining splines, flutes and gears, it is useful too for milling, shaping and grinding squares, hexagons or odd angles. Accurate cross-drilling also can be held to close tolerances with the Indexing Centers.

Equipped with graduated collar, a ball crank and worm gear turn the

head center. Each graduation indicates a center movement of three minutes while a complete turn of the ball crank revolves the center five degrees. An easily read dial on the worm wheel is graduated 360 degrees. For quick positioning of the center, the worm gear can be disengaged and a clamping device locks the head center in any desired position. As an added feature, the plunger type tail center with automatic spring tension permits removal of the work without disturbing the head center.

SOUTH BEND LATHE, South Bend 22, Ind.

Hearing Aid

SE-221

Accurately Transmits Human Voice



The Ambco Portable Hearing Amplifier, developed at the request of Mrs. Lynndelle, Consultant in Education of the Hard of Hearing in California, accurately transmits the range and tonal qualities of the human voice.

With such an instrument, hard-of-hearing children are given the opportunity to enjoy speech and music, participate in activities in the classroom, join in class discussions, improve general classroom work and learn to correct or improve possible defects in speech and voice.

A. M. BROOKS CO., Dept. C, 1222 W. Washington Blvd., Los Angeles 7, Calif.

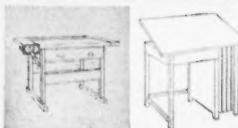
SE-222

Amateur Theatricals Kit

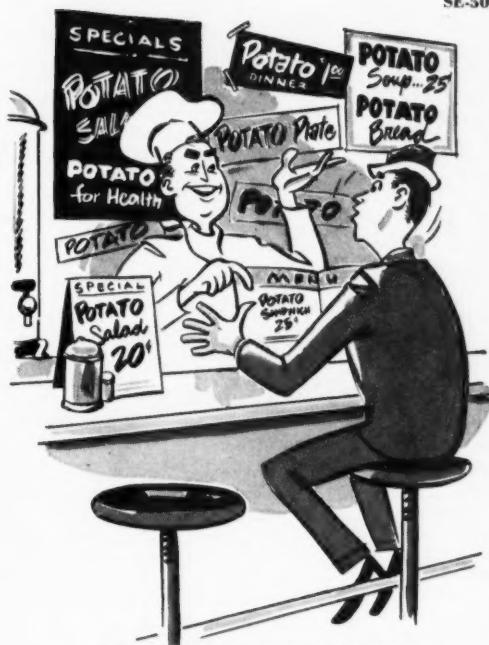
Contains Makeup, Props, Plays

The Hollywood Backstage Theatre Kit for amateur theatrical use contains high quality cosmetics, including grease paint, powder, rouge, eyebrow makeup, and a wide range of props—mustaches, pipes, cigars, glasses, jewelry, tooth black and theatre tickets. Full makeup instructions and a book of three original plays with simplified production notes for amateur use are included.

THE HOLLYWOOD BACKSTAGE CO., Stage 2, 200 S. Lake St., Los Angeles 4, Calif.



SE-50



**Ever since the boss got that new UNIVEX
that's the way it's been . . . see page 136**

SE-195

to heighten your choir's performance . . .

MOORE CHORAL GOWNS

All eyes are upon your choir! Be sure the group's appearance is magnificent—with the colorful splendor of Moore Choral Gowns! These graceful robes highlight every performance and help to capture audience attention. Shown here is The Harmonic, its beauty accentuated by an inner-lining of satin in the sleeves and a matching satin dickey. This is only one of many glamorous interpretations of traditional Moore Choral Gowns. Send today for complete information, free Choral booklet \$44, Fabric and Color Selector. Or write for sample Gowns; no obligation.



E. R. MOORE CO.

932 Dakin Street, Chicago 13, Ill.
25-34 Jackson Ave., Long Island City 1, N.Y.
1908 Beverly Blvd., Los Angeles 4, Calif.

also makers of caps and gowns • girls' gym suits

Your school, too, can afford the very best . . .

The years and years of dependable trouble-free service built into Newcomb products, together with their matchless facility for meeting all the varied requirements of sound equipment in education, make Newcomb by far your most economical choice. Approved by leading school authorities from coast to coast.



TR-25AM

Variable control of tempo and pitch

TR Models provide variable speed control for special applications of sound in teaching music, dancing, gym, language, etc.

FLOATING SOUND

Exclusive feature eliminates needle skipping due to jolts and jars of dancing feet.

MODEL TR-25AM: A versatile, 25 watt, 3 speed player for all records up to 17 1/4". Two 12" speakers. Inputs for 2 mikes, 1 phone with separate tone controls. An effective scratch suppressor. Magnetic pickup.

MODEL TR-16AM: 10 watt, 3 speed player, all records to 17 1/4", 12" speaker. Inputs for 1 mike, 1 phone with separate volume. Magnetic pickup. Scratch suppressor.

MODEL TR-16A: Same as above with crystal pickup, no scratch suppressor.

MODEL R-16: 5 watt, 3 speed player, combines light weight with ruggedness. All records to 17 1/4", 10" speaker. Mike and phone inputs with separate volume. Crystal pickup.

MODEL R-12: 5 watt, high quality, 3 speed player. All records to 12". Oval 6" x 9" speaker. Crystal pickup.

MODEL RC-12: Same as above with changer.

MODEL B-100: AM radio with unbelievable tone. Extremely sensitive. Large built-in loop. Jack for use as a tuner connected to P.A. system or for headphones. 6" speaker.

100% A.C. CONSTRUCTION

All models include power transformers for best performance and complete protection from shock hazard.

••••• Write for catalog



TR-16AM



R-16



RC-12



B-100



NEWCOMB

DEPT. S, 6824 LEXINGTON AVE.
HOLLYWOOD 38, CALIFORNIA



Snow Plow

SE-223

For Large Volume Snow Removal

The improved Sno-Master rotary screw type snow plow is powerful yet easy to operate. Because the chain-equipped wheels are power-driven, the machine has the traction necessary to remove up to 2 feet of snow, even wet snow, with minimum effort on the part of the operator. He merely operates the throttle and guides the self-propelled unit, even up heavy grades.

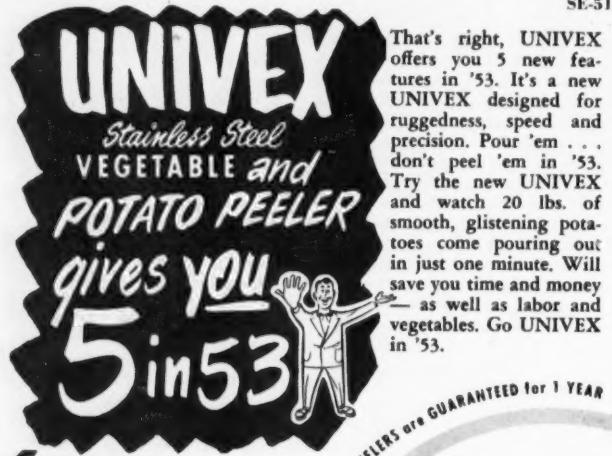
In operation, a sturdy rotating screw located in the front of the Sno-Master forces snow into power-driven $\frac{3}{8}$ " revolving steel blades which throw it to the side. The deflector is



adjustable to direct the snow to either right or left and to control the dis-

SE-51

That's right, UNIVEX offers you 5 new features in '53. It's a new UNIVEX designed for ruggedness, speed and precision. Pour 'em . . . don't peel 'em in '53. Try the new UNIVEX and watch 20 lbs. of smooth, glistening potatoes come pouring out in just one minute. Will save you time and money — as well as labor and vegetables. Go UNIVEX in '53.



5 SUPERIOR FEATURES:

1. Quieter operation and longer life with the new Univex Flexi-Drive.
2. One-twist lubrication with the new external grease fitting.
3. Peeling efficiency increased and waste decreased with new contour door.
4. Extra power with less current consumption adds up to greater economy.
5. New precision sleeve gyro type insert lengthens life of main bearing.

ALL THESE NEW FEATURES...
AT THE SAME LOW PRICE
(Both Models D and C are portable)

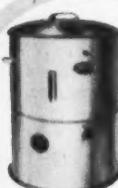
\$139.95



Model D



\$107.50



Model C

UNIVERSAL
INDUSTRIES
369 MYSTIC AVENUE - SOMERVILLE 45, MASS.

tribution. Because the force is sufficient to throw the snow 25', the operator can distribute the snow widely to direct it away from shrubs, flower beds, etc. The machine can be guided over obstacles by applying downward pressure on the handles.

THE BREADY TRACTOR & IMPLEMENT CO., 393212 Aurora Rd., Solon, Ohio.

School Bus Chassis SE-224

Eight Models Available

Eight specially engineered school bus chassis for 30 to 60 pupil body capacity are offered in the new B-4 Series of Dodge Job-Rated trucks. The new chassis, engineered for dependable and economical service, are offered in wheelbases of 152, 192, 212, and 229 inches to accommodate bodies for 30, 36, 48, 54, and 60 pupils. Gross horsepower is 118, 120, and 122 and maximum gross vehicle weight ranges from 10,475 to 19,500 lbs. Thus the most economical size to suit individual schools may be chosen.

Additional safety is provided by the new brakes which have great stopping ability with low pedal pressure and more braking power for emergency stops. Two of the three economical engines are entirely new. The engines provide ample power reserve for hills and bad driving conditions in mud and snow.

DODGE DIVISION, CHRYSLER CORP., Detroit 31, Mich.

Electrical Indicator SE-225

Available as Table Model

Fielden Instrument Division announces a new electrical indicator based on the same principle as the Tektolog Recorder. It is available as a table model for use in lecture halls or demonstration rooms.

With a frontal area of 15" x 16" and an effective scale length of 11", it is clearly visible and readable at 40 to 50 feet. The measuring element is a moving coil meter movement adapted to the Fielden capacity follower system. The pointer is servo-driven and absorbs no energy from the meter movement. Full-scale travel is approximately 1½ seconds.

This unit is suitable to educational and training establishments where electrical and similar phenomena may be demonstrated to large classes.

FIELDEN INSTRUMENT DIV., ROBERTSHAW-FULTON CONTROLS CO., 2920 N. Fourth St., Philadelphia 33, Pa.



MANLEY, INC.

1920 Wyandotte St.
Kansas City 8, Mo.

"We make \$8.25 a day with our Manley popcorn machine..."

says Eberly Hammack, Superintendent, Colerain Township School, Cincinnati, Ohio. "Furthermore, that's just while operating our Manley popcorn machine during the noon hour. Sales during athletic events boost our school's extra income much more. We use only Manley supplies, too, and everyone tells us our popcorn is the finest they've ever tasted."

Let Manley help you every step of the way toward getting the things your school needs by selling popcorn. Investigate this big profit opportunity for your school. Mail coupon now for the whole story.

Nobody Outpops Manley

**THE BIGGEST NAME
IN POPCORN
THROUGHOUT THE WORLD**



MANLEY, INC.

Dept. SE-253, 1920 Wyandotte St., Kansas City 8, Missouri

Please send me your FREE booklets, "Popcorn Is a Food" and "How to Make Big Profits from Popcorn."

Please have a representative call.

Name _____

School _____ Position _____

Address _____

City _____ Zone _____ State _____

Fluorescent Chalks

In Five Colors

The American Crayon Co. announces a new line of fluorescent chalks in the form of Excello Squares which is especially practical for lecturers, chalk-talks, class demonstrations, and numerous other purposes.

The chalks, which are called Hi-Glo, come in square sticks: 1" x 1" x 3". They are now available in five colors of dazzling brilliance: Flare Red, Flash Orange, Brilliant Yellow, Green and Violet.

Drawings done in regular chalk

SE-226

colors with highlights in Hi-Glo have an unusual effect when activated by a black or blue light.

THE AMERICAN CRAYON CO., Sandusky, Ohio.

Stainless Steel Knives

*SE-227
Of Solid, One-Piece Construction*

Bloomfield Industries, Inc. has just introduced a new, fine quality, low priced stainless steel knife for table use. Known as Model No. 904, this knife has a solid, one-piece construc-

tion so that blade and handle can never become loose or separated. Made of finest quality cutlery stainless steel, polished to a mirror finish, it is easy to keep bright and gleaming with just ordinary soap and water washing.

Specially hardened blades insure long life and prevent dulling of the very keen edge.

BLOOMFIELD INDUSTRIES, INC., 4546 W. 47 St., Chicago 32, Ill.

Scaler

SE-228

For Minimum Radio Lab Work

SE-53



These Universal improvements SAVE DISHWASHING DOLLARS

FOR 180° RINSE — Your choice of improved electric, gas or steam operated rinse water boosters built right into Universal Dishwashing Machines. Meet Health Authority requirements. Require no extra plumbing. Save installation cost.

FOR TIME CONTROL OF DISHWASHING CYCLE — An improved hydraulic operated timed wash and rinse control unit for the complete wash, dwell and rinse cycle. The simplest and most dependable timer made.

FOR 50% BETTER DISHWASHING — Universal "Swing-Wash" and Universal revolving wash feature motion in the wash cycle. "Swing-Wash" moves the dishrack back and forth under power wash. Revolving Wash features a constantly changing water pattern. Increases coverage of wash sprays. Available on certain models.

31 MODELS TO CHOOSE FROM

You get improved design, advanced performance when you buy a Universal Dishwasher. You pay no more but you get more value.

Write for Complete Catalog — TODAY!

Universal
DISHWASHING MACHINERY CO.

57 WINDSOR PLACE, NUTLEY 10, N. J.

World's Largest Exclusive Producer of Commercial Type Dish, Glass and Silver Washing Machines

Nuclear's new precision-built decade Model 180 Rediscaler is a low-cost model incorporating only the necessary operating features for minimum radio-laboratory work. Quality is the same as in larger units costing more.

Easy to use and dependable in operation, the Rediscaler will serve universities and colleges for instruction and routing counting in radioisotope work as well as research work in institutional radio-laboratories.

The G-M input sensitivity is $\frac{1}{4}$ -volt. Counts are recorded on an easily-read, built-in counter.

NUCLEAR INSTRUMENT & CHEMICAL CORP., 229 W. Erie St., Chicago 10, Ill.

Masonry Drill

SE-229

Carboly Tip Resists Dulling

Dust packing which causes stalling is overcome by the unique design of a new Masonry Drill. The Hi-Twist can be used for continuous drilling of concrete, stone, brick, and similar materials as well as copper, brass, and other soft metals.

The secret of dust removal is in the proper combination of oval flutes, narrow lands, and fast spiral which carries the dust up and out of the hole as fast as it forms.

The drill is made of a very tough alloy steel with a carboly tip which resists dulling.

HOLUB INDUSTRIES, INC., Sycamore, Ill.



American Approved Castle Tower



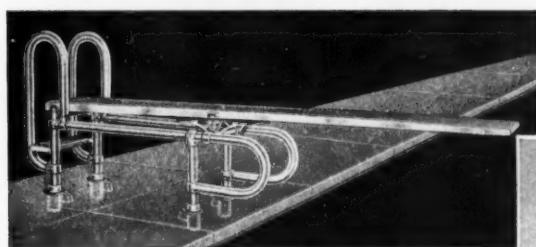
An American Approved Combination Unit



You'll like doing business with AMERICAN

★ Since 1911, the finest Park, Playground and Swimming Pool Equipment built, backed by a *Lifetime Guarantee* against defective materials or construction . . . low, nationally advertised prices which today average but little above pre-war 1941 . . . prompt, courteous and highly personalized service on both your problems and your orders . . . prompt, friendly adjustments to your complete satisfaction, marked by a sincere desire to merit an enviable reputation nearly half a century old . . . unsurpassed strength, durability, performance and safety.

These are but a few of the many reasons why we believe you will enjoy doing business . . . now and in the future . . . with AMERICAN.



**All-American Heavy-Duty Uniform Hanger
For All Athletic Uniforms**

An American Official Regulation One-Meter Unit



Write Today FOR CATALOGS AND SPECIAL LITERATURE FEATURING AMERICAN APPROVED

PLAYGROUND EQUIPMENT • • SWIMMING POOL EQUIPMENT • • ALL-AMERICAN PICNIC GRILLS
ALL-AMERICAN UNIFORM HANGERS • • AMERICAN HEAVY DUTY CHECKING AND GYMNASIUM BASKETS
STEEL BASKET RACKS • • AMERICAN REPAIR EQUIPMENT • • AMERICAN HOME PLAY EQUIPMENT

Internationally Specified Internationally Approved

Slide Projector

SE-230

Assures Brilliant Screen Image

The Reviewer 500 is a new blower-cooled, 500-watt projector for $2\frac{1}{4}''$ x $2\frac{1}{4}''$ (convertible to $2''$ x $2''$) slides. Handsomely styled and finished in baked enamel, this color-slide projector is compact and portable. The 500-watt bulb and large four element condensing system (including AO patented heat absorbing glass) assures a screen image of maximum brilliance from edge to edge.

The silent motor-driven blower cools the lamp house as well as the slide and the condensing elements. There is no possibility of danger to valuable slides no matter how long

they are left in the projector. A choice of 5" or 7" Americote objectives are available.

AMERICAN OPTICAL CO., Southbridge, Mass.

Floor Wax

SE-231

Offers Exceptional Wearing Qualities

Super Swiftsheen has a special formula which includes imported Carnauba wax and other highly refined and blended ingredients. Every run of Super Swiftsheen is tested for lustre and wear factors before shipment is made.

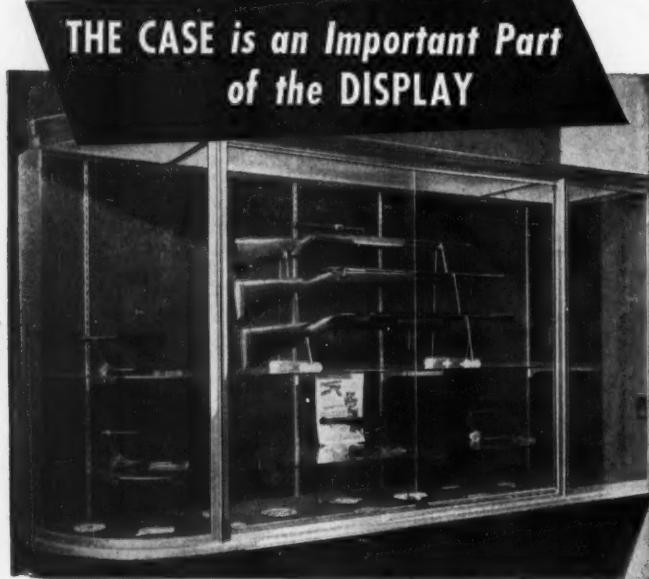
This new wax is actually waterproof. Tests prove that it can be exposed to water for up to three days without deterioration of appearance or protective quality. For cleaning purposes, a mild soap solution can be used over it to remove severe surface dirt without harming the finish.

Other features include: high gloss luster when buffed; at least six months attractive, effective life; and 50% reduction in normal scrubbing and rewaxing procedures.

Easily applied with a clean lamb's wool applicator, cotton mop or spray, the wax is recommended for use on linoleum, asphalt tile, rubber tile, and plastic tile, as well as all wood floors.

THE GERSON-STEWART CORP., Lisbon Rd., Cleveland 4, Ohio.

SE-55



... and Michaels "Time-Tight" exhibit cases provide that all-important part. They are designed and constructed for maximum visibility, and actually accentuate the beauty of exhibits. Furthermore, handling and theft as well as the ingress of dirt, vermin and moisture are reduced to a minimum.

"Time-Tight" cases are made in table, aisle, wall, corner, suspended and recessed styles, and in any practical size. If it is necessary to meet specific requirements, Michaels will build special cases to exact specifications. Innerlocking Frames, exclusive with Michaels; fully mitred intersections; no screws exposed on the face of frames, are a few of their outstanding features.

"Time-Tight" cases are used extensively in museums, art galleries, libraries, universities, colleges, schools, science laboratories, for industrial exhibits, and various related types of display rooms.

Write for fully illustrated literature.

THE MICHAELS ART BRONZE CO., INC.
243 COURT STREET, COVINGTON, KENTUCKY

Manufacturers since 1870 of many products in Bronze, Aluminum and other metals

Silver Washer, Drier

SE-232

Handles 900 Pieces Per Hour



A new Foley Silver Washer and Drier, Model A-3, has just been announced by the Foley-Irish Corp.

Rated at a capacity of 900 pieces of silver per hour, it has been specifically designed for medium and smaller sized schools. A height of 31" permits under-counter installation. Its electrical requirements are such that no special line is necessary for its operation. A removable drum type, it combines all the proved features of the larger model A-7 with some improvements to facilitate maintenance.

This machine is completely automatic and goes through its entire three-phase cycle of washing, rinsing and drying with electrically heated forced air at 200° while the operator is free to go about other tasks.

Field tested for a year under all working conditions, this machine is designed to deliver clean, dry, sterilized silverware speedily and in quantity.

THE FOLEY-IRISH CORP., 45 Astor Pl., New York, N. Y.



And we mean it!

**MAKE IT A POINT TO VISIT
The IRWIN SEATING EXHIBIT
BOOTHS I-27 and I-29
A·A·S·A· CONVENTION**

A visit to our booths will familiarize you with the best buys in seating equipment for every classroom and auditorium need. Here you will find an excellent array of fine, modern-to-the-minute seating equipment (many with G-E TEXTOLITE tops) . . . moderately priced. Our seating specialists will be happy to discuss your individual seating problems with you.

If you cannot attend, write for catalog containing complete information.

FEBRUARY 14 TO 19
ATLANTIC CITY AUDITORIUM
ATLANTIC CITY, N. J.



IRWIN SEATING Company
GRAND RAPIDS, MICHIGAN

SE-233
Washing Machine Valve
Shuts Off Hot, Cold Water



The new Symmons Duplex Pro-

ector Valve prevents the bursting or dripping of washing machine hoses in homemaking laboratories. A simple flick of the finger completely shuts off both hot and cold water by means of a single small lever-type handle. It prevents dripping and completely removes all pressure from both hoses when the machine is idle.

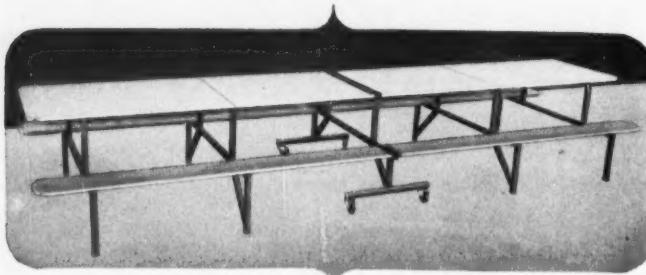
The valve is of rugged, cast-bronze construction. It is actually two valves in one unit. It inserts in the hot and cold supply lines at the take-offs between the hoses and the lines themselves.

SYMONS ENGINEERING CO., 791 Tremont St., Boston, Mass.

SE-57
two rooms for one!

SAVE SPACE WITH ERICKSON FOLD-A-WAY TABLES

The versatility of Erickson Fold-A-Way Tables with Benches is endless . . . cafeterias, art classes, PTA meetings, displays, map work, study groups. The nation's architects and school authorities acclaim their usefulness and their beauty - gleaming Formica top, banded edges and baked enamel chassis.



ERICKSON FOLD-A-WAY TABLES REDUCE LABOR 90%

Erickson Fold-A-Way Tables with Benches can be moved and stored in mere minutes. 12 and 14-ft. portable models fold to 9 inches. 8-ft. wall-attached models fold to wall. Indestructible steel chassis, solid benches and tops.

NO COMPROMISE WITH QUALITY

Write to Dept. X for complete information.



HALDEMAN-LANGFORD MFG. CO.

2580 University Ave., St. Paul 14, Minn.

See our exhibit at the American Association of School Administrators, National Education Association
 February 14-19, Atlantic City, Lower Level Booth 1226.

SE-234
Micro Centrifuge
Operates Up to 23,000 RPM



A new micro centrifuge that operates up to 23,000 rpm is now available for microchemical and clinical testings. Measuring only $7\frac{1}{2}$ " high and $6\frac{1}{2}$ " in diameter, this sturdy, precision-made centrifuge accomplishes work ordinarily requiring a larger centrifuge. The unit holds 8 tubes with capacities up to 1 ml. Tubes are placed opposite each other with no precision balancing required. A powerstat is available for controlling speed up to 23,000 rpm.

MICROCHEMICAL SPECIALTIES CO., 1834 University Ave., Berkeley 3, Calif.

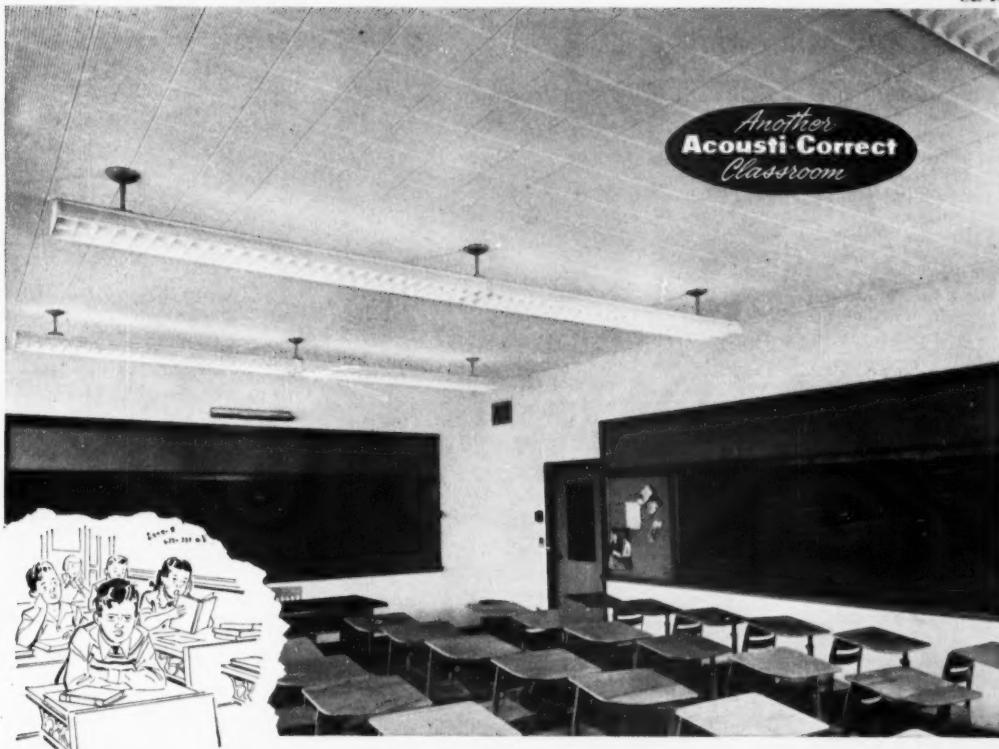
SE-235
Vacuum Cleaners
Feature New Suction Unit



Two completely new Vac-It units, designated Models No. 30 and No. 40, have been developed by The Doyle Vacuum Cleaner Co. The main performance feature of the new machines is a radically new suction unit that applies the full motor shaft energy to instantly produce the correct combination of volume, velocity, and suction.

Other new features include: 4 positive "quick-lock" cams to secure head and tank assemblies; easy accessibility of all parts; convenient carrying handles; new 1 h.p. Universal motor with extra large brushes for longer life; shock mounting the suction unit in sponge rubber, etc.

THE DOYLE VACUUM CLEANER CO., 225 Stevens St., S. W., Grand Rapids, Mich.



Do your pupils face this hindrance to learning?

Educators today are increasingly concerned over the problem of poor acoustical environment in the classroom. Unchecked noise and faulty acoustics, they recognize, interfere with distinct hearing... induce strain and fatigue... hamper concentration... handicap pupils and teachers alike.

Low-Cost Answer

That is the reason more and more schools are installing Acousti-Celotex Sound Conditioning. A sound-absorbing ceiling of Acousti-Celotex Tile creates conditions favorable to good hearing in classrooms, auditoriums, music rooms. In study halls, libraries,

band rooms, corridors, gyms and cafeterias—it "soaks up" noise, brings quiet comfort that benefits all.



DOUBLE-DENSITY—As the diagram shows, Acousti-Celotex Tile has two densities. High density face, for a more attractive finish of superior washability, easy paintability. Low density through remainder of tile, for great sound-absorption value.

Easy Maintenance

Acousti-Celotex Tile is quickly installed at moderate cost. Needs no special maintenance. Its remarkable double-density feature (see diagram) prevents warping—provides a surface of unequalled beauty and washability. Can be washed repeatedly and painted repeatedly with no loss of sound-absorbing capacity.

GET A FREE ANALYSIS of the acoustical and noise problems in your school without obligation. We will also send you free a factual booklet, "Sound Conditioning for Schools and Colleges." Mail coupon below today!

—Mail coupon today—

The Celotex Corporation, Dept. D-23
120 S. La Salle St., Chicago 3, Ill.

Without obligation, I would like . . .

A free analysis of the noise and acoustical problems in my school.
 A free copy of your booklet, "Sound Conditioning for Schools and Colleges."

Name _____

Address _____

City _____ Zone _____ State _____



ACOUSTI-CELOTEX

TRADE MARK REGISTERED

U. S. PAT. OFF.

Sound Conditioning

Products for Every Sound Conditioning Problem—The Celotex Corporation, 120 S. La Salle St.
Chicago 3, Illinois • In Canada: Dominion Sound Equipments, Ltd., Montreal, Quebec

Addressing Machine**Produces 2,000 Pieces Per Hour**

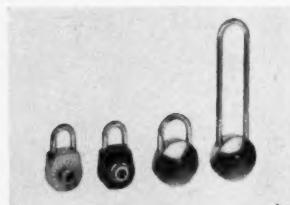
A new Weber addressing machine, called Model A-3, has fewer manual operations and an increased addressing speed of 2,000 pieces per hour. It features the "automatic name advancer" that mechanically moves each name and address into perfect printing position.

This machine operates on the spirit principle of reproduction. It requires no stencil, plates, ribbon or ink. Addresses are transferred to the mailing piece from a typewritten paper tape. This original list can be used up to 100 times.

WEBER ADDRESSING MACHINE



Co., 200 W. Central Rd., Mt. Prospect, Ill.

Keyless Lock**Works in the Dark**

The Gougle Keyless Lock is different from other keyless locks in that it "clicks". Ordinary keyless locks require light so that the figures on the dial may be seen. All that is necessary to open the Gougle lock is to turn the dial and count the clicks as you do so.

Two types are available—one, the stop-type keyless padlock with a fast-action touch-click combination starting from a positive stop; the other, a combination which starts from zero on the dial with a certain number of "clicks" to the right or left and then reverse four or five times until the combination is worked and the lock is opened. They are offered in different styles for a variety of purposes. For schools, one with a Master Key and one without, is available.

C. L. GOUGLE KEYLESS LOCK CO., Kent, Ohio.

Why buy several machines for maintaining your school floors when one Tennant "C" will do it all? Just flip open the drum hood, slip on an 8" or 16" accessory . . . and you're all set for a new operation: cleaning-waxing-polishing; dry-cleaning; buffing (wet or dry); and sanding.

This rugged, versatile machine assures excellent results in classroom, gym, corridors, shop or lab . . . costs you less to buy . . . is easier to use . . . and cuts down expense. Used by large and small schools.

TENNANT MODEL C

Extension hood for 16" accessories

Write Today for details.

Machine at left works close to walls, has 2 drum speeds, 1725 rpm motor. Accessory rolls, brushes for all types of floors.

G. H. TENNANT CO.
2540 North 2nd Street
Minneapolis 11, Minnesota

SEE FOR A TENNANT
REPRESENTATIVE TO INSPECT YOUR FLOORS

TENNANT
Floor Maintenance System
ESTABLISHED 1870

Folding Table**Features New Plastic Top**

The Foldcrafter is a light-weight banquet table which features a new plastic top called Nulite. The tables embody the principle of a one-piece steel frame with welded cross-channels and riveted legs forming a single unit. The result is a table that is unusually steady, solid, and safe.

The tubular steel legs are formed to provide knee room for those sitting at the side but ample foot room for those at the end. Positive locks hold the legs steady, without wobble. Steel frames enclose the legs for easy stacking and handling.

FOLD CRAFT, INC., 825 Glenwood Ave., Minneapolis 5, Minn.

there is



**ONE
RIGHT
SPOT**

for you

ONLY *Strong* SPOTLIGHTS

AFFORD ALL THESE ADVANTAGES

- An abundance of exceedingly bright, quiet, flicker-less light.
- Sharp edge head spot to flood.
- No heavy rotating equipment required. Simply plug into 110-volt outlet.
- Ready portability. Mounted on casters. Easily dis-assembled for shipping.
- Two-element, variable focal length objective lens system.
- Silvered glass reflector.
- Horizontal masking control angled 45-degrees in each direction.
- Fast operating 6-slide color boomerang.



TROPERETTE INCANDESCENT SPOTLIGHT
for small theatres, hotels, night clubs, schools. Projects 6½ times brighter head spots than any other incandescent spotlight. Utilizes all the light through most of the spot sizes as contrasted to spotlights which vary spot size solely by iris, thus losing substantial light.

TROOPER HIGH INTENSITY ARC SPOTLIGHT
for large theatres, arenas, auditoriums, ice shows. Adjustable, self-regulating transformer in base. Automatic arc control. A trim of carbons burns 88 minutes. Slide projector attachment available for projecting clean, sharp, clearly defined pictures even on largest screens.

- Please send free literature and prices on the Strong Trouper Arc Spotlight; Strong Trouperette Incandescent Spotlight.

● NAME _____

● STREET _____

● CITY & STATE _____

● NAME OF SUPPLIER _____

THE STRONG ELECTRIC CORPORATION

"The World's Largest Manufacturer of Projection Arc Lamps"

114 CITY PARK AVENUE • TOLEDO 2, OHIO

Audio-Visual Aids

SE-301 A Walk in the Sun on 16mm

A Walk in the Sun, the widely-acclaimed dramatic feature film about a G.I. platoon in Salerno during World War II, is now available in 16mm for rental to schools, colleges, and community organizations. ASSOCIATION FILMS, INC., 347 Madison Ave., New York 17, N. Y.

SE-302 Forging Metal

The Utica Drop Forge & Tool Corp. is producing a new 20-minute sound film to depict 5,000 years of progress in forging metal. Three-dimensional, activated dioramas will be used to show ancient methods of smelting and forging. UTICA DROP FORGE & TOOL CORP., Utica 4, N. Y.

SE-303 Primary Science Filmstrips

Growing Things. This new series of seven filmstrips utilizes full-color drawings to show plant, animal, and human growth. Designed for primary children, each growing thing in the filmstrips is introduced naturally through the activities common to young children. Titles are: *Plants Grow*; *Trees Grow*; *Butterflies Grow*; *Toads Grow*; *Birds Grow*; *Rabbits Grow*; and *We Grow*. The selection of plants and animals covers various types with different life cycles. The text is brief, with simple vocabulary. THE JAM HANDY ORGANIZATION, 2821 East Grand Blvd., Detroit 11, Mich.

SE-304 Historical Recordings

World History. Three 12", LP records, containing twelve separate productions. Titles of the records and of the productions are: *The Ancient World*; *The Phoe-*

nician Traders; *The Golden Age of Greece*; *Turning Point for Rome*; *Decline of Rome*; *World of the Middle Ages*; *The Feudal Manor*; *Towns Against Feudalism*; *Gateway to Discovery*; *The Renaissance Scientist*; *Dawn of the Modern World*; *Declaration of the Rights of Man*; *The Emerging of Japan*; *Prussia Forges a Nation*; *Building an Empire*. Total playing time is over two hours. A teachers' guide booklet presents the objectives and background of each production as well as questions for classroom discussion and suggested student activities. Aimed at junior and senior high school grade levels. AUDIO CLASSROOM SERVICES, 323 S. Franklin St., Chicago, Ill.

SE-305 The Need for Guidance

Insuring Our Investment in Youth. 16mm sound. Black and white. This is a public relations film for use by the guidance field of education. Designed for meetings of civic and teacher groups, this film was produced to explain a specific phase of education to the lay public. It demonstrates the need for guidance services in our schools, shows the waste of funds and productive time in the schools, and business and industry resulting from inadequate provisions in our school systems for counseling and occupational study. In addition, it shows the steps taken by a well-conceived guidance system when a high school boy is helped to solve his educational planning problems. CARL F. MAHNKE PRODUCTIONS, 215 E. Third St., Des Moines 9, Iowa.

SE-306 Spring Filmstrip-Slide Folder

Free copies of a new 16-page illustrated booklet devoted to S.V.E. filmstrips and slide-sets for Lenten, Easter, and Spring programs are now available. Write to SOCIETY FOR VISUAL EDUCATION, INC., 1345 Diversey Parkway, Chicago 14, Ill.

SE-307 Prehistoric Times

Prehistoric Times: The World Before Man. 16mm sound. Color or black and white. Here is the dramatic sweep of two billion years of prehistory—from the formation of the earth to the coming of man. Each of the five great geological eras is presented according to its most important geological and biological developments. Colorful dioramas, actual fossil remains, examples of terrain, and models of prehistoric plants and animals establish the broad impression of the earth's transformation and the accompanying changes in life. CORONET FILMS, 65 E. South Water St., Chicago 1, Ill.

SE-308 Queen Maud Land

White Continent. 16mm Sound. This film is the exciting account of the first stage of the joint Expedition sponsored by Norway, Britain, and Sweden to Queen Maud Land in the Antarctic. Technicolor photography gives a vivid impression of the polar landscape, its hazards, and its special beauties. BRITISH INFORMATION SERVICES, 30 Rockefeller Plaza, New York 20, N. Y.

SE-309 Free Film List

United World Films, Inc., announces its new Free Films list available to schools. Both documentaries and educational films are listed and described. UNITED WORLD FILMS INC., 1445 Park Ave., New York 29, N. Y.



BERLIN All-Steel Type C GRANDSTANDS

Here is "life-time" construction . . . Berlin permanent (Type C) grandstands are specifically designed and engineered for permanent mounting, but so designed as to meet your requirements for future expansion—in length or height . . . They have found wide acceptance because they provide a fine appearance plus convenience and comfort at a minimum per seat installation cost . . . they offer comfortable seating . . . maximum safety . . . flexible capacity, and above all simplified erection . . . Berlin Type C units are built in standard sections but should additional capacity be needed, extra sections can be easily added at any time . . . aisles and walkways may be placed as needed. All unit sections are standardized, parts interchangeable so that erection costs are held to a minimum. Back of every Berlin installation are 44 years of structural experience — your assurance of complete satisfaction. For complete details write

Berlin Chapman Company
Berlin, Wisconsin

BERLIN
SEATING
ENGINEERS

BERLIN, WISCONSIN



THIS GRUELING TEST helps you get more for your money in G-E Projection lamps. G-E technicians continually measure lamp life and light at high temperatures, simulating actual operating conditions . . . one of many check-ups in General Electric's quality control of production.



MECHANICALLY formed filament, shown in plastic display, is typical of G-E improvements that mean better service, lower costs for you.



Don't let a
burnout spoil your
show! Get a spare
G-E projection
lamp now!

G-E Projection lamps

Tests burn 'em "hot" to keep you "cool"

Q. How hot does a projection lamp get? **A.** To deliver maximum light, projection lamp filaments must burn at better than 3000° C.! So General Electric tests its projection lamps really "hot"—under conditions at least as severe as in your projector—to make sure that their performance keeps you "cool", satisfied.

Constant inspection on the production line . . . constant research in the laboratory . . . help assure you of optical precision, more uniform screen brightness, maximum light, dependable performance from G-E Projection lamps.

To get the most from your projector, use G-E Projection lamps and keep a spare handy, so a burnout won't spoil slide or movie show.

Remember, there's a G-E lamp for every photographic purpose

GENERAL  **ELECTRIC**

Manufacturers' Catalogs

SE-310 Patrol Equipment Catalog

School Safety Patrol Equipment. This new brochure describes and illustrates the Graubard line of safety patrol equipment including Sam Browne belts, caps, badges, safety sentinels, etc. GRAUBARD'S INC., 266 Mulberry St., Newark 2, N. J.

SE-311 Photo-copier

A new folder is available that describes the Contoura Portable Photo-copier and its uses. It is completely portable and may

be carried in a briefcase. F. G. LUDWIG ASSOCIATES, Deep River, Conn.

SE-312 Roofing Tile

Ludowici Roofing Tiles. In full color, this catalog shows the exact colors and patterns available in the Ludowici line of roofing tiles. LUDOWICI-CELADON CO., 75 E. Wacker Dr., Chicago 1, Ill.

SE-313 Steel Fire Partition

Safety Calls for Mobilfirewalls. This new brochure describes an Underwriters' Approved one-hour movable steel partition. Suitable for storage areas and other special spaces in public buildings, schools, laboratories, etc. VIRGINIA METAL PRODUCTS CORP., 1112 First National Bank Building, Pittsburgh, Pa.

SE-314 Elevators

Vertical Transportation by Otis. This publication describes the complete line of Otis equipment and services including sections on passenger elevators, escalators, freight elevators, elevator modernization and maintenance programs. OTIS ELEVATOR CO., 260 Eleventh Ave., New York 1, N. Y.

SE-315 Atom Models

Fisher-Hirschfelder-Taylor Atom Model Sets. A 12-page, fully illustrated booklet on atom models which describes the theory, construction, uses and limitations of the organic atom models and the metal-coordination atoms. Of special interest to instructors of stereochemistry. FISHER SCIENTIFIC CO., 717 Forbes St., Pittsburgh 19, Pa.

SE-316 Painting Concrete Floors

This is the Way to Paint Your Concrete Floors. This folder contains recommendations for preparation of both previously painted and unpainted floors prior to application of Pliolite S-5 paints, which impart alkali-resistant, chemical-resistant coatings to masonry surfaces. GOODYEAR TIRE & RUBBER CO., Chemical Div., Akron 16, Ohio.

SE-317 Soap

Why Your School Should Use G-11 Soap. An illustrated brochure giving pertinent information on skin cleanliness and the control of such common school age troubles as skin blemishes. SINDAR CORP., 830 W. 42 St., New York 36, N. Y.

SE-318 Movable Walls

Mills Movable Metal Walls, Catalog No. 53. The new Mills Co. catalog shows how space layouts can be made permanently efficient by mobilizing them with Mills Movable Walls. The walls can be moved quickly, easily, and at very low cost to fit new space layouts. Durable baked-on enamel finishes, all-welded steel construction, scientific sound-proofing and insulation, and other special Mills features are described. THE MILLS CO., 975 Wayside Rd., Cleveland 10, Ohio.

SE-319 Musical Instruments

Sears Silvertone Musical Instruments and Beckwith Pianos. The items listed and shown in full color are Sousaphones, French, baritone horns; woodwinds from bassoons to piccolos; cellos, violas, bases; drums and the Beckwith line of pianos. SEARS, ROEBUCK AND CO., Chicago 7, Ill.

SE-320 Vacuum Cleaners

Form No. 521. This colorful folder details features of the new WD-23 and WD-15 set-dry vacuum cleaners. A list of available attachments is included. CLARKE SANDING MACHINE CO., Muskegon, Mich.

SE-321 Stage Lighting

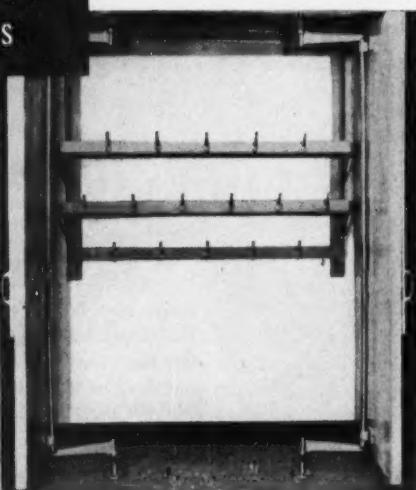
Catalog No. 952. This catalog presents a representative selection of the Hub line of recessed, surface, and suspended lighting equipment for schools. The line includes stage lighting, aisle, step and night lights, flush luminous elements, Holophane Controls elements, exit and directional signs, fluorescent and slimline troffers, and stage switchboards and dimmer banks. HUB ELECTRIC CO., 2255 W. Grand Ave., Chicago 12, Ill.

A PRACTICAL RECEDING DOOR

CLASSROOM WARDROBE

ELIMINATES OVERCROWDING
EASILY INSTALLED
LOWERS COSTS

ARNCO
ENGINEERED



• Here's a thoughtfully engineered means of providing efficient, sanitary housing for pupil's clothing within the classroom. Design is based on all-steel construction, including doors, trim, shelving, etc. Easily opened by small children.



Write for copy of detailed brochure "finger-tip operation" Classroom Wardrobes.

NON-SAGGING HARDWARE of Rugged construction is fully adjustable and operates on two sets of ball bearings, strategically placed to insure smooth, trouble-free operation.

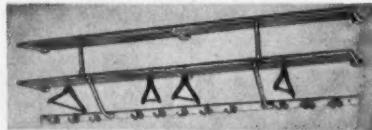
A. R. NELSON CO., INC. 210 E. 40th St., New York 16, N.Y.

NEW! ARNCO ALUMINUM COAT AND HAT RACK

In non-peeling aluminite finish. Low priced. Strong, economical, easy to install.

Write for literature.

ALSO CURTAIN CUBICLE SCREENING for dressing rooms, rest rooms, medical examination rooms, gym dressing rooms.





Attention!

**VICTOR 16mm
PROJECTOR OWNER
THE COUPON BELOW
IS FOR YOU**



Magnesound

Only Victor has Magnesound. Only Magnesound is a magnetic sound attachment. With revolutionary Magnesound, you add your own low-cost sound to films by using your Victor 16mm projector. To give your films added effectiveness the sound track can be adapted for any need and can be changed over and over. You enjoy complete flexibility by having both magnetic and optical sound on the same film.

*Complete attachment includes
Magnesound drum and amplifier,
microphone and carrying case.*



**VICTOR
ANIMATOGRAPH CORPORATION**

DAVENPORT, IOWA

Chicago • New York • Distributors Throughout the World

Magnesound

**OFFERS THESE GREAT
FEATURES!**

- 1 The only magnetic attachment on the market—and it is specifically designed to fit your Victor 16mm Sound Projector.
- 2 Unmatched price . . . complete unit only \$199.45.
- 3 Easy to attach. Easy to operate.
- 4 High fidelity sound for voice and music.
- 5 Records and plays back immediately!

FOR THE FULL STORY, MAIL TODAY

**VICTOR ANIMATOGRAPH CORPORATION
Department M-48, Davenport, Iowa**

I want to increase the use of my Victor projector.

Please send me full information on the Magnesound Recording Attachment.

Forward name of my Victor distributor.

NAME _____

ADDRESS _____

CITY _____ STATE _____

New Textbooks

SE-322 Biography of Alexander Hamilton

Alexander Hamilton, by Nathan Schachner. 229 pages. This reader has a great deal of interesting background material on the life of Alexander Hamilton which can be read with profit. Pen and ink drawings by Gillett Griffin decorate the text. McGRAW-HILL BOOK CO., INC., 330 W. 42 St., New York 36, N. Y.

SE-323 Introduction to Economics

Understanding Our Free Economy, by

Fred Rogers Fairchild. \$3.96. This elementary textbook, which introduces the subject of economics, sets forth clearly and objectively the essential facts and principles of economics with their application to the various economic systems. It shows how the free economy works and what it accomplishes, along with exposition of the nature and consequences of socialism, communism, and other collectivist systems. D. VAN NOSTRAND CO., INC., 250 Fourth Ave., New York 3, N. Y.

SE-324 Nursery School Music

Music for Early Childhood, edited by McConathy, Morgan, Mursell, Bartholomew.

Bray, Miessner, and Birge. 134 pages. This is a brand new idea in textbooks. The text is a running story studded with music and abundant activities. The story centers around Miss T in her classroom, and her different pupils, who are seen as school opens, at block time, at rest time, on the playground, during story hour, and on trips through the neighborhood. Many of the American folk songs used are new, hitherto unpublished material from the Library of Congress. Other songs are works of living composers. Thirty-one of these songs have been recorded by Columbia Records in an album which may be used with the book. Specially designed for nursery school and kindergarten. SILVER BURDETT CO., 45 E. 17 St., New York 3, N. Y.

SE-325 Basal English Texts

Enjoying English, by Wolfe, Geyer, DeLancey, Hamilton. Grades 3, 4, 5, 6. Each book in this series has eight expanding units into which the four basic communication skills are naturally blended to meet the everyday, ever-growing needs of pupils. Motivation: A poem and a story based on an experience real to every child set the mood for each unit. Speaking and Listening: Children talk about the theme, tell their stories, discuss talks by other children, tell things in order, build sentences, develop paragraphs, and learn correct usage through oral games. Reading and writing: Writing evolves from the activities in reading, speaking, and listening. Written work is always preceded by oral exercises. Group Activity: Shared experiences include reading, listening to and discussion of poetry, making posters, dramatizing, choral reading, panel discussions, etc. THE L. W. SINGER CO., INC., Syracuse, N. Y.

SE-326 Mutiny on the Bounty

Mutiny on the Bounty, by Charles Nordhoff and James Norman Hall. 322 pages. \$2.24. In adapting the text of *Mutiny on the Bounty*, the original narrative has been faithfully kept, and only long and tedious descriptions and explanations have been eliminated or condensed. The vocabulary has been simplified wherever possible to keep within the first 7,000 words of Thorndike's Teacher's Word Book. In addition, maps and teaching aids have been included. GLOBE BOOK CO., 175 Fifth Ave., New York 10, N. Y.

SE-327 Business Law

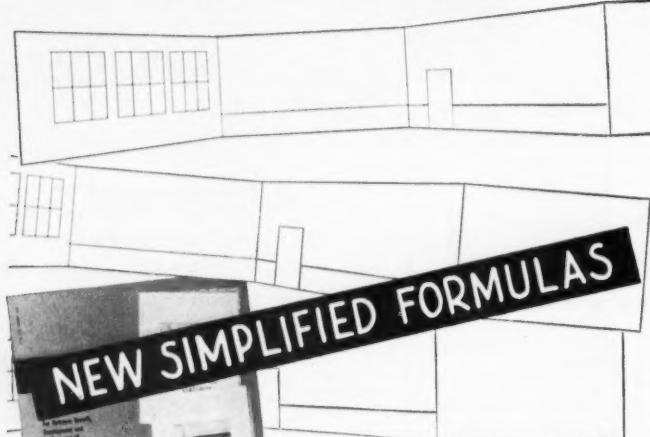
Burgess Business Law, revised by Harvey A. Andrus. Fourth Edition. 600 pages. \$2.24. In adapting the text of *Mutiny on the Bounty*, the original narrative has been faithfully kept, and only long and tedious descriptions and explanations have been eliminated or condensed. The vocabulary has been simplified wherever possible to keep within the first 7,000 words of Thorndike's Teacher's Word Book. In addition, maps and teaching aids have been included. GLOBE BOOK CO., 175 Fifth Ave., New York 10, N. Y.

SE-328 Textbook Catalog

Textbook Catalog 1953. This new catalog describes the Bobbs-Merrill textbooks for elementary, junior, and senior high schools. Subjects include: Americanization, Character Development, English, Geography, Health Education, Language, Literature, Reading, Safety, Social Studies, etc. BOBBS-MERRILL CO., INC., 730 N. Meridian St., Indianapolis 7, Ind.

HOW TO DECORATE CO-ORDINATED CLASSROOMS

Write for Free Copy!



Now it's easier than ever to healthfully decorate classrooms. This 16-color brochure is known throughout the world as the most competent treatment for painting walls, ceilings and woodwork in proper colors and light reflectances. Revised edition simplifies the mixing of colors, contains complete specifications and instructions.

School Department LUMINALL PAINTS

3617 S. May Street, Chicago 9, Ill.

Please send us a free copy of "How to Decorate Co-ordinated Classrooms."

Name _____

School _____

Address _____

City _____ Zone _____ State _____

Luminall Paints, CHICAGO 9, NEWARK 5, LOS ANGELES 1

FIBERESIN*
Desk Tops

on
American
Desk
MANUFACTURING CO.
ONE-12

and other equipment in-
cluding the Airplane Table
and Tablet Arm Chair

*There's a
real reason!*

FIBERESIN provides a durable, smooth, ripple-free surface of proper light reflectivity for ideal student use. The uniformly hard surface eliminates once and for all the natural tendency of doodling and "trenching" so common with natural wood. The hard, dense edges that need no extra applied protection defy abuse and have no "layers" to separate or cause slivers.

Proven in tests and in actual service from coast-to-coast, FIBERESIN Desk Tops provide an almost indestructible surface with practically no maintenance costs.

***FIBERESIN** — a laminated board having a melamine resin plastic surface on an extremely dense core of wood fiber and phenolic resin. This combination of materials is welded together in hydraulic hot plate presses at high temperatures and pressures. The decorative wood grain pattern and color is an integral part of the surface.

DEVELOPED and PIONEERED by



American Desk Manufacturing Co.'s fa-
mous ONE-12 shown with Tubular legs.
Also available with Angle Steel legs.



Resistant...

Tough plastic surface is vir-
tually indestructible. Staining,
chipping, cracking and scratch-
ing are practically impossible.
No warping, no veneer layers,
no metal or wood edges.



Reflective...

Fiberesin surface scored A+
in reflectance tests conducted
by University of Wisconsin
showing ideal reflectance
value of 40-50%.

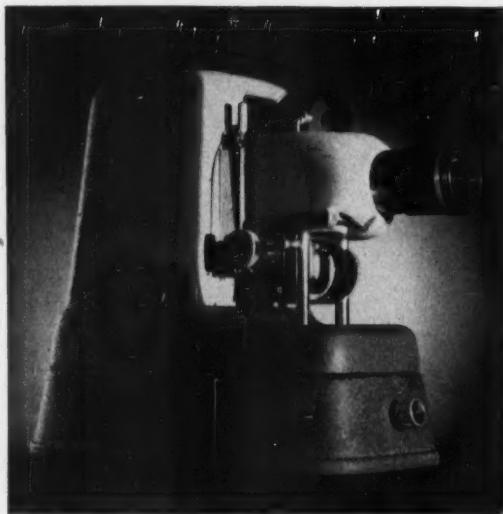


Remarkable...

Maintenance as simple as
ABC's! Marks and stains are
readily removed by wiping
with damp cloth. Never needs
refinishing.



Standard PROJECTOR 500C GIVES YOU SHARP, CLEAR



DAYLIGHT PROJECTION!

The 500 watt screen brilliance of the New Standard Projector assures sharp, clear pictures on the screen—even in undarkened classroom. Meets modern classroom conditions—teacher can see students, students can see to take notes.

Easy to use. *Directed* push-in threading. Quick positive framing action. *Micro-release* lets projector raise itself to desired height. *Picture-leveler* levels image on the screen regardless of uneven floor or table. Built-in *mechanical pointer* is operated at projector. Quick pull-out, push-in change from filmstrips to 2" x 2" slides.

Sturdily built for long life. New jet-style designing in rich two-tone "crinkle" finish. Comes complete with deluxe, richly covered, lift-off carrying case with fittings for slide changer, spare lamp, and space for filmstrips.

New Standard 500C Projector, complete with New-type Lift-Off, Fitted Carrying Case with Push-in power Cord Receiver

\$114.80

Ask Your Audio-Visual Education Dealer For Details

Standard Projector & Equipment Co., Inc.

7106 Touhy Ave., Chicago 31, Ill.

SE-190

PENCO-DESK

FITS ANY STUDENT



SE-191



FOR STAR PERFORMANCE

SPECIFY

N A D E N
ELECTRIC SCOREBOARDS

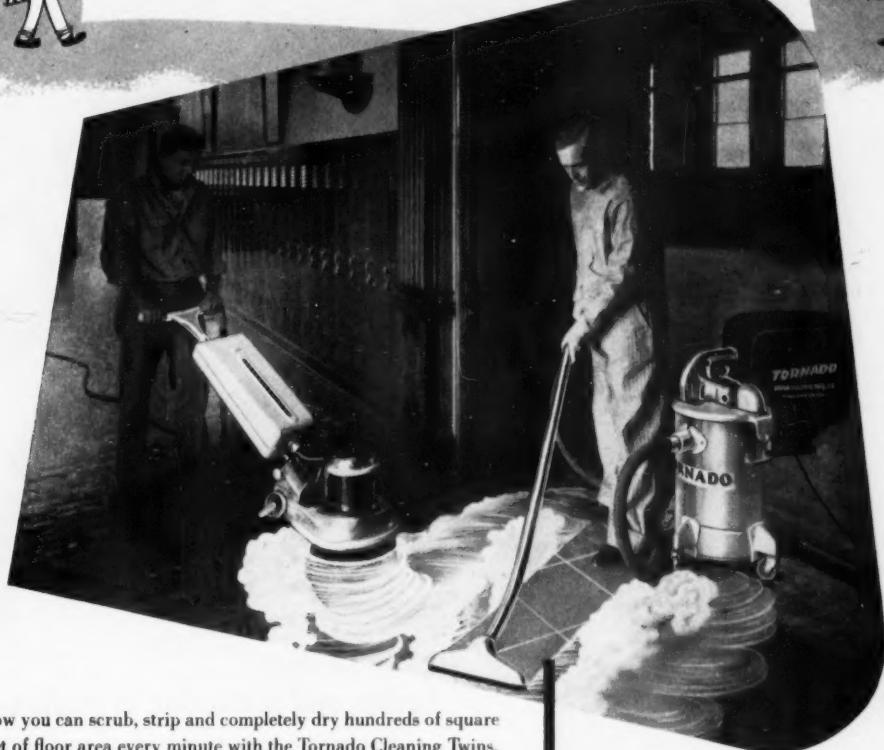


Naden's Natural Numerals plus built-in accuracy insures maximum audience and player appreciation. Compact, simple to operate and maintain a NADEN ELECTRIC SCOREBOARD IN YOUR GYM WILL ELIMINATE YOUR SCORING PROBLEMS. WRITE FOR FREE DETAILS. THERE IS A REPRESENTATIVE IN YOUR LOCALITY.

NADEN & SONS
WEBSTER CITY, IOWA

PENINSULAR MANUFACTURING CO.
1017 Cottage Grove Street, S.E.
GRAND RAPIDS 7, MICHIGAN

LET THE TORNADO TWINS CUT CLEANING TIME IN YOUR SCHOOL



Now you can scrub, strip and completely dry hundreds of square feet of floor area every minute with the Tornado Cleaning Twins. This faster, more thorough cleaning cuts hours off of floor cleaning time.

The smooth, evenly balanced Tornado floor machine applies plenty of scrubbing power to remove all dirt and old wax in a single application.

Follow this with the Tornado school cleaner, which picks up all the dirt laden solution in a single stroke. It actually pulls water out of cracks, leaves floors bone dry, ready for a fresh coat of wax.

The Tornado Twins actually double or triple the speed with which you strip and clean floors.

TORNADO FLOOR MACHINE

6000 series in 12", 14", 16", 18" sizes, scrubs, polishes, sands, shampoos and steel wools all type floors.

TORNADO SCHOOL CLEANER

Model 92-A wet or dry vacuum cleaner. Remove motor unit for shoulder type cleaner, portable blower or blower-sweeper for under desk cleaning.

Write for literature on the "Tornado Twins"



BREUER ELECTRIC MFG. CO.

5088 North Ravenswood Avenue • Chicago 40, Ill.

sharp
future
ahead



Career girl or housewife, neat work habits are developed in the schoolroom. *

"APSCO sharp" educators know that sharp pencil points assure neat work, thus better grades.

For all-around use in the classroom we recommend the APSCO Dexter No. 3, the heavy-duty sharpener with the selector type dial that will sharpen all size wood case pencils without leaving a shoulder.

Remember, there's an APSCO Sharpener for every need. Look for the APSCO Trademark when you buy.



automatic pencil sharpener co.

336 North Foothill Road Beverly Hills, California
Rockford, Illinois • Toronto, Canada



you can't buy better INSURANCE



Straubel
ROLL TISSUE
and TOWELS

**For student
health and sanitation in washrooms**

Your facilities are beyond criticism with these Straubel products — by sanitation standards and economy, both! Highly absorbent, strong-fibred, yet extra-soft tissues do not easily puncture . . . And, Straubel's exclusive "Convenience-Cut" roll dispenses but two sheets at one time — stopping waste and tissue littered floors. You'll save and satisfy with Straubel's hand towels, too, because fewer are needed for a perfect drying job. They come in 100% kraft, semi-kraft or manilla — white, natural or brown — priced to meet every school budget.

FIT ALL STANDARD FIXTURES . . . Don't be misled — no special cabinets are required for Straubel products. They are made in standard sizes and folds to fit all nationally known fixtures.



THREE LEAF Interfolded
tissues are your wise
choice for cabinet or re-
cessed fixtures.

STRAUBEL PAPER CO. • GREEN BAY • WIS.

Straubel tissues and
towels are sold thru mer-
chants of paper products
only. Write for dealer's
name.



THE EASY WAY TO

"SPARK" SCHOOL INTEREST



As thousands of school administrators know—the Revere Tape Recorder stimulates attention and *response* in practically every class and school function:

- ... whenever repetition is essential to learning as in dramatics, languages, or music classes;
- ... when special treatments will clarify technical subjects;
- ... when a record library or professional entertainment is too expensive;
- ... when important school events or reports should be "preserved" for future reference.

Revere is designed to bring the maximum benefits of tape recording to your school—with a minimum of operating effort or cost. It will be an indispensable school assistant to you!

Revere "Balanced-Tone" Tape Recorder

The tone quality of professional broadcast studio equipment. Simplified, automatic keyboard operation. Exclusive index counter for instantly locating any part of recorded reel. Two full hours recording per 7" reel of erasable, reusable tape. May be used for public address system. **Model T-700** . . . \$225.00
Model TR-800—Same as above, with built-in radio \$277.50
T-100—Standard one-hour play \$169.50
T-500—Deluxe, 2-hour play, 5" reels \$179.50
TR-200—One hour play, built-in radio \$224.50

REVERE CAMERA COMPANY • CHICAGO 16, ILLINOIS



Revere TAPE RECORDER



and for showing your
educational films at their best...

REVERE 16mm. SOUND PROJECTOR

Provides "theater tone" with sharp picture projection! A-B-C simplicity of operation; light 33-pound portability. Incomparable Revere styling and durable construction. With speaker-carrying case and cord, take-up reel, 1600' reel extension arm, instructions—only

\$325⁰⁰

Here's Why
audiotape*
 gives you **EXTRA VALUE**
at no extra cost!

For professional quality in your school recordings, use the same magnetic recording tape that the experts use. That's Audiotape — made by audio engineers, to meet the most exacting professional requirements.

It's now available on plastic or paper base, and in all standard size reels from 150 to 5,000 feet.

Here are some of the extra-value features that you get in the new 7" reels of plastic-base Audiotape — at no extra cost.

GUARANTEED SPLIC-FREE

IMPROVED REEL DESIGN with new 2½ inch hub gives more accurate timing, more constant pitch, slower rotational speeds, reduced tape tension and less head wear.

PERFECTED ANTI-FRICTION PROCESS eliminates annoying tape squeal — prevents "tackiness" even under extreme temperature and humidity conditions.

MAXIMUM UNIFORMITY OF OUTPUT — guaranteed not to exceed $\pm\frac{1}{4}$ db within the reel and $\pm\frac{1}{2}$ db from reel to reel. What's more, Audiotape oxide is specially formulated to give maximum output with *minimum distortion*. *Trade Mark



FREE: *A liberal education in modern sound recording*

Audio Record brings you up-to-the-minute information on all phases of tape and disc recording — including articles of special interest to schools and colleges. A letter or post card will put your name on our free mailing list.



AUDIO DEVICES, Inc.

444 Madison Ave., New York 22, N.Y.

audiodesics • audiotape • audiofilm • audiopoints

Preferred by School Buyers Everywhere!

Master No. 1525

Thousands of combinations, with 3-number dialing, protect the student — yet only one school-owned master key opens every locker.

Master No. 1500
 Same as No. 1525, but without key-control.

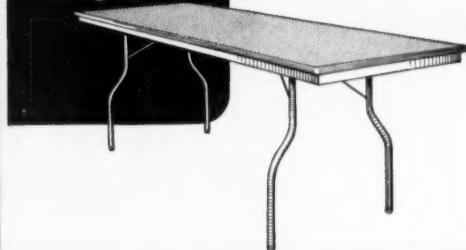
KEY-CONTROLLED
 School's master key opens every locker.

FREE — 4 page folder with complete information on both No. 1525 and No. 1500. Write today to Dept. B.

Master Lock Company.
 Milwaukee 45, Wis.
 World's Leading Padlock Manufacturers

IDEAL UTILITY
 folding tables

- sturdy
- easy to store
- easy to clean



Count all the things you want in a folding table and you'll find them *all* in IDEAL folding tables. Curved legs allow for maximum seating capacity. Smooth tops are mar and stain resistant, clean easily. Locking device assures against collapse. Only 3 inches thick when folded. They're IDEAL!

HANOVER
 SALES COMPANY

Dept. 1, 27 York St., Hanover, Pa.



Good territories still open for dealers

NEW, IMPROVED *Churchill* MACHINES

Designed to Make Your Cleaning and Floor Maintenance Faster, Easier, More Efficient!



"16" All-Purpose Machine

Embodyes latest improvements in design and construction. Adaptable to polishing, scrubbing, sanding, grinding, etc. Easily converted to a rug scrubber. Exceptionally quiet . . . a quality so essential for institutions. Equipped with specially designed, continuous duty, repulsion-induction motor. Fitted with high-carbon steel and composition type gears; sealed against moisture and other matter . . . insuring constant lubrication. Complies with Federal Specifications.

"12" Floor Machine

A high-quality machine produced to sell at a low price. It polishes and scrubs rapidly, efficiently . . . reducing labor costs to a minimum. All exposed metal parts are of chrome and polished aluminum. Powered with a continuous duty, capacitor-type electric motor. Equipped with high-carbon steel and composition type gears . . . sealed in! Motor reduction gives floor brush a speed of 190 r.p.m. Adjustable handle; retracting wheels.

VACUUM CLEANER

A quiet machine, yet very powerful. Has strong multi-stage turbine fans which provide exceptionally strong suction for removing dirt, metal and other dry matter . . . water and other liquids. Also has powerful exhaust for blowing dirt from surfaces which cannot be vacuum cleaned. Tank and motor unit is very compact (weighs only 46 lbs. dry) and easily portable. Has unusually high ratio of h.p. to water lift. Tank capacity is 1½ bushels or 10 gallons.

These new, improved machines plus the original Churchill floor machines (Noiseless"16" and "Tru-Eze") make up the most complete line we have ever offered. Now there is a Churchill machine to meet practically every need and price requirement . . . designed to make your cleaning and floor maintenance faster, easier, more efficient and lower in cost. Built for long life and trouble-free operation, any of these machines will be a valuable addition to your school's equipment. For complete information and prices, call your Churchill distributor or representative, or write . . .

CHURCHILL MANUFACTURING COMPANY
GALESBURG, ILLINOIS

FOR SUPERIOR FLOOR AND BUILDING MAINTENANCE MATERIALS AND TOOLS

what a Rauland Sound System Does for Your School



SC160 System

SIMPLIFIES ADMINISTRATION

Have efficient control and coordination of all activities. Cut the volume of carried messages—make announcements (to selected rooms or to entire school) without routine-disturbing assemblies—take attendance records speedily—have safe, sure centralized supervision of fire drills and emergencies. Have at your fingertips instant two-way intercommunication between any classroom and central office for effective administration.

STIMULATES LEARNING

Provides dramatically effective teaching materials. Radio broadcasts, records and school-produced "live" broadcasts can be channeled to selected rooms, to vitalize instruction in history, current events, geography, languages, music appreciation, speech, and drama. Record music provides rhythm for physical education, cafeteria entertainment, background music for disciplined assemblies and dismissals—these and a host of other valuable functions contributing to the enhancement of the school program.

THE RAULAND SC160 SYSTEM OFFERS ALL THESE FEATURES:

1. Every desirable program service: Radio, Phonograph, Microphone and Intercommunication. 2. Distribution of programs to any selected room or to all rooms. 3. Three-program facilities available simultaneously to different groups of rooms. 4. High Fidelity AM and FM Radio (one or two as desired). 5. Three-Speed Transcription Type Phonograph. 6. Facilities for broadcasting any classroom activity over the entire system. 7. Adequate microphone circuits (six). 8. Speech origination from classrooms. 9. Secret system with complete privacy. 10. With monitoring tone signal. 11. Automatic Master Emergency Call button operating regardless of any control or switch setting. 12. Automatic Program Schedule Clock. 13. Compartments for storing records and accessories. 14. Compartment with sliding shelf for record changer or recorder. 15. Underwriters' Approved.

Let us show you, without obligation, how the RAULAND SC160 System incorporating all of these features, can enhance the administrative and educational program of your school. Write us today for full details.

RAULAND-BORG CORPORATION

OVER 1500 SCHOOLS ARE EQUIPPED WITH

Rauland
SOUND AND INTERCOMMUNICATION

New Way to Serve Many and Save Money!



ARROWHEAD
Cafeteria Trays
and Accessories

molded of Melmac in five pastel colors.

SAVE Cut replacements to a minimum because ARROWHEAD is practically unbreakable!

SAVE One unit serves a whole meal; is tray and plates all in one. Lock-in sections for cup and bowl.

SAVE Easier handling, fewer pieces to wash and stack, saves time and labor!

Specially designed for cafeterias by the makers of ARROWHEAD and Efficiency Ware

Write for catalog sheet

international molded plastics, inc. cleveland 9, ohio



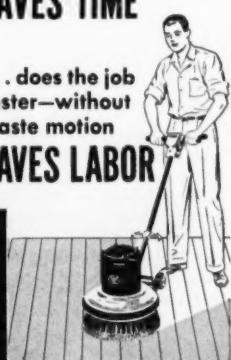
FOR EASIER FLOOR UPKEEP



For floor finishing or daily maintenance, Brillo solid-disc steel wool floor pad hardens and brightens finish. Regular once-over removes traffic grime—renews gloss quickly without rewaxing. Equally efficient for linoleum, asphalt or rubber tile, wood and terrazzo.

**... BRILLO
cleans and buffs
in one operation
SAVES TIME**

**... does the job
faster—without
waste motion
SAVES LABOR**



For free folder on low-cost Brillo floor care, write to Brillo Mfg. Co., Dept. S, 60 John St., Brooklyn 1, N. Y.

BRILLO
SOLID-DISC STEEL WOOL
FLOOR PADS

These youngsters may never need to learn to use this: $F = \int_{380}^{760} K_\lambda J_\lambda d\lambda.$ *

but they learn quickly to appreciate better seeing conditions Curtis "Eye-Comfort"® Illumination the result of combining illuminating engineering with newest lighting techniques.

*Equation for luminous flux



The Curtis "CORONET" line is a new series of fluorescent luminaires designed to provide high levels of illumination for schoolrooms and offices. They are available for all 4, 5 and 8 foot lamps in two-lamp and four-lamp parallel construction. Units are durably constructed with all control

equipment enclosed in a sturdy steel housing. Efficient side reflectors are Alzak Aluminum or baked white "Fluracite" enamel on steel. Complete details are illustrated and described in a newly printed bulletin. Write today for a FREE copy. Address Dept. B27-13.

CURTIS LIGHTING, INC.
6135 West 65th Street Chicago 38, Illinois

One of a Series

Selecting Gymnasium Seating?

Let's talk about VISIBILITY and COMFORT...

They're mighty important. Your gymnasium seating must provide spectators with a clear view of the playing floor, and it must seat them comfortably.

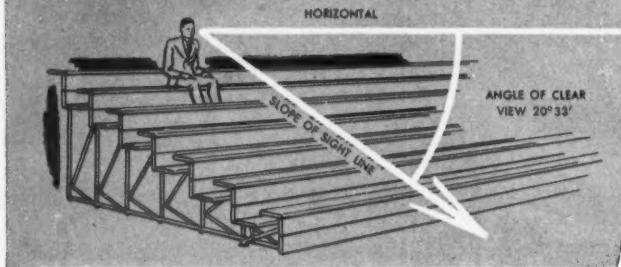
In Wayne Rolling Gymstands every spectator in every row gets an absolutely unobstructed view. Short people don't have to crane their necks and tall folks

don't obstruct the view of those in back. And it's simply because Wayne Gymstands have a rise-per-row of 10½ inches, a row-to-row elevation greater than in any other make of rolling gymnasium seating.

Wayne Rolling Gymstands are comfortable. Their 17-inch chair height seats

are ideal for the vast majority of spectators. And there's plenty of room for people to move their feet around, too.

Superior visibility and comfort are only two of many reasons why you should specify WAYNE to fill your gymnasium seating needs. Get the full story in our new Catalog R-52, yours for the asking.



Wayne Iron Works

144 N. PEMBROKE AVE., WAYNE, PA.



WAYNE STANDS FOR SAFETY

SE-131

can your students define “PELICLE”

The only way to comprehensively study the processes of birth and growth in lower organisms is through the marvels of microphotography, time-lapse photography, and X-ray photography. United World Films has prepared a complete Series of 12 16mm films covering the intricate field of Zoology for high school and college study. Prepared under the guidance of Dr. F. L. Fitzpatrick, Professor of Natural Sciences, Teachers College, Columbia Univ., this Series permits detailed study of the individual creature and the process of animal development as a whole. All films 10 minutes, b&w, sound, \$45.00 except #7 which is 20 minutes and \$90.00; purchased as a unit this Series sells for \$500.00.

1—AMOeba, 2—PARAMECIUM, 3—HYDRA, 4—THE SEA URCHIN, 5—EARTHWORMS, 6—LIFE CYCLE OF A FLY, 7—STORY OF THE BEES, 8—SPIDERS AND SCORPIANS, 9—CRAYFISH, 10—LIFE CYCLE OF A TROUT, 11—LIFE CYCLE OF THE FROG, 12—DEVELOPMENT OF THE CHICK.

UNITED WORLD FILMS, Inc.,
1445 Park Ave., New York 29, N. Y.

Send me preview prints of 1 2 3 4 5 6 7
8 9 10 11 12 (circle choice or choices).
I am considering these for purchase.
 Send me additional information on this Zoology
Series of 16mm films including a free Teachers
Note from the Series.

NAME.....

TITLE.....

ADDRESS.....

CITY..... STATE.....

SF-2

it's the CLICK that counts

Count the "clicks" — presto, it's open! You don't have to see the dial to work the combination. For quickest and easiest operation — as well as economy, security, and durability in schools — it's the Gougle Keyless Lock.



Locks
serially
numbered

FREE
Service
Records

Materials &
Workmanship
Guaranteed

WRITE
FOR
INFORMATION

C. L. GOUGLER KEYLESS LOCK CO.

705-769 Lake St., Dept. 3, Kent, Ohio

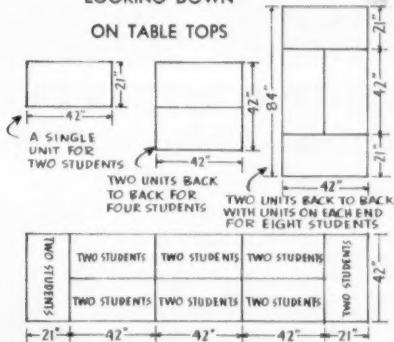
MAXIMUM EFFICIENCY WITH A-D's

Airplane Table

★ FLAT TOP
★ FUNCTIONAL
★ FLEXIBLE



LOOKING DOWN
ON TABLE TOPS



The adaptability of the units used in group work is clearly illustrated by the use of two tables back to back,

affording a working unit of four students with a large working area. Four, six, or eight units may be readily grouped so that actually the entire class can engage in group work where desirable. By eliminating extra tables and chairs, classroom space is conserved, and the per unit seating cost is equalized.

A matching No. 22 Chair completes the unit.

American Desk
MANUFACTURING COMPANY

MANUFACTURERS OF PUBLIC SEATING • • • Temple, Texas





Crafted of richly grained Celts, a native hardwood

Practical answer to the problem of furnishing college rooms...

Dormitory furniture must be designed to take exceptionally hard usage, be adaptable to any room, compact and comfortable. It must be smartly styled yet practical in price. Handsome *American Informal* passes every test. This painstakingly crafted furniture is constructed for years of service. For complete facts, write to Contract Division, Furniture by Tomlinson, High Point, North Carolina.



Handsome "Driftwood" finish is lustrous and durable.

American Informal *



U.S. PAT. OFFICE

FOR STUDENT ROOMS, LOUNGES, DORMITORIES, SORORITIES AND FRATERNITIES

Clebar

the stop watch of
split second accuracy



#650

1/5 second timer
for general timing,
7 jewels, Clebar
quality, non-mag-
netic, 30 minute
register-start, stop
and fly-back from
crown.

There is a Clebar stop watch for
every precision timing purpose.
Write for new FREE catalog
which illustrates more than a
score of models.

CLEBAR WATCH AGENCY

521 FIFTH AVENUE, NEW YORK 17



WHAT A DIFFERENCE between this...and this

**Bassick Rubber Cushion Glides
make the difference!**

You'll notice how much quieter cafeterias and classrooms are when you install smooth-sliding, noiseless Bassick Rubber Cushion Glides on furniture, chairs and equipment. Their broad, flat, polished, hardened-steel base (cushioned in rubber) protects floors, reduces floor maintenance and classroom clatter. Write for free set. State whether for wood, flat metal or tubular metal furniture (for latter, give tube's inside diameter). THE BASSICK COMPANY, Bridgeport 2, Conn. In Canada: Belleville, Ont.



RIGHT IN YOUR OWN BACK YARD...

BY WEST



New floors cost \$300,000,000 a year!

TYPE OF FLOOR	INSTALLED COST* OF 50,000 SQ. FT.
Asphalt Tile	\$15,000
Concrete	18,000
Linoleum	21,000
Hardwood	27,500
Cork	39,000
Rubber Tile	44,000
Vinyl Tile	44,000
Ceramic Tile	65,000
Terrazzo & Mosaic	87,500
Marble	300,000

*Based on reports of reliable flooring contractors in urban areas.

How much will it cost you to replace worn-out floors today? The chart gives you some idea.

But, your floors *don't have* to wear out. They can be protected almost indefinitely.

How? With West's simple, proven FLOOR PRESERVATION PLAN. (1) *Cleaning* — remove all dirt without harming floors (2) *Sealing* — fill the pores. Provide a protective coating (3) *Maintaining* — put on a tough, anti-slip floor wax.

The West Plan offers you more than 20 proven products. A West Floor Specialist will be glad to help you select the program or product you need.

Please send FREE booklet "Proper Care of Floors"

DEPT. 15

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____



42-16 West Street, Long Island City 1, N. Y.

BE BRIGHT with

Colorbrite

the
Feather touch
lead



Feather touch lead

... assures brilliant color without bearing down. "Your office staff will love it!"

makes easier reading

... on colored paper, under fluorescent light — makes no difference! Colorbrite proved easier to read.

and it's Guaranteed

Patented Elastic Lead Guaranteed not to break in normal use. AND — Colorbrite is smearproof — wetproof — fadeproof.

**AVAILABLE IN 24 INDIVIDUAL
COLORS OR SETS OF 12 AND 24.**

**EBERHARD
FABER** **since 1849**

TRADE MARKS REG. U.S. PAT. OFF.

SE-140

SE-138



Hussey Model 8 installation at Pettengill Park, Auburn, Maine

WHETHER YOU NEED 48 OR 48,000 SEATS

Hussey Patented Portable Steel Sectional Bleachers and Grandstands are the most practical and most economical answer to your seating problems. They can be used for baseball, football, etc., and then quickly and easily moved inside for basketball and other indoor needs. They are safe, cannot collapse, last indefinitely and sections can be added as needed.

Because of their exclusive patented features, they can be set up and taken down faster and easier than any other stand—only 1.2 minutes per seat to set up and 1 minute per seat to take down. Available in two styles—Model 6 Portable Bleachers and Model 8 Portable Grandstands.

FREE catalogs and complete information on request. Write today!

IRONWORKERS  SINCE 1835

Hussey Mfg. Co. Inc.

530 Railroad Avenue No. Berwick, Maine
Also Mfrs. of—Diving Boards, Floats, Piers, Water Sports Equip., Flag Poles, Fire Escapes and Misc. Iron.

SE-139



**NO OTHER ORGAN
OFFERS
YOUR SCHOOL
SO MUCH**

Prices start
at \$1264

Shown here
MODEL 2C2
TWO MANUAL
FULL A.G.O.
32-NOTE
PEDAL BOARD

Connsonata

CHOOSE AMERICA'S FINEST ELECTRONIC ORGAN

You'll find through actual comparison and demonstration that no other organ, electric or electronic, offers so much for the money ... no other organ is so suitable for school or auditorium.

CONNISONATA is a development of the Sound and Electronic Research Laboratories of C. G. CONN Ltd., world's largest manufacturer of band and orchestra instruments, specialists in musical tone for over 75 years. CONNISONATA, Division of C. G. CONN LTD., ELKHART, INDIANA, Dept. 232



**WRITE FOR
Free
LITERATURE**

THE SCHOOL EXECUTIVE

Unmatched In The Public Seating Field!

Samson Folding Chairs

Offer More EXTRA-QUALITY FEATURES!



*Schools and Churches...Check
These Points Before You Buy!*

- ✓ Comfort-Curved Design!
- ✓ Tubular-Steel Construction!
- ✓ Reinforced Legs!
- ✓ Safety-Guard Hinges!
- ✓ Replaceable Rubber Feet!
- ✓ Chip-Resistant Finish!
- ✓ Weather Resistance!

**There's A Samson Folding Chair
For Every Public Seating Need!**

2100 Series
Spring-Cushion
Armchair



2700 Series
Padded-Sent
Chair



2025 Series
Plywood-Sent
Chair



2900 Series
Spring-Cushion
Chair



**See The New
Samson
Banquet Table!**



• Here's a table that has greater strength, with less weight, than any other folding table of comparable size! Exclusive Samson safety-lock prevents legs from folding until released. Damage-resistant Masonite top. Sets up easily, stores compactly. In 6- and 8-ft. lengths, 30 inches wide.



Strong Enough To Stand On!

**THERE'S A SAMSON FOLDING CHAIR
FOR EVERY PUBLIC SEATING NEED!**

NO OTHER FOLDING CHAIR offers you all of the above extra-value features—which you will find in even the least expensive Samson folding chairs.

And when you choose one of the many upholstered models of Samson Folding Chairs, you get still another extra bonus—special heavy-duty Samsonex vinyl covering that's actually 50% more serviceable than vinyl material designed for home use! It has amazing resistance to scuffing and hard wear, and washes clean with a damp cloth. Adds years to the life of Samson Chairs—yet you pay no more!

Write, on your letterhead, for the free booklet "How To Save Money On Public Seating." It describes the entire line of Samson chairs, and tells you how to get the most for your seating dollar. Your Samson Public Seating distributor is now offering special low prices on quantity purchases. Ask him for them—or write us direct.

Shwayder Bros., Inc., Public Seating Division, Dept. W-2, Detroit 29, Mich.

ALSO MAKERS OF FAMOUS SAMSON FOLDAWAY FURNITURE FOR THE HOME AND SMART SAMSONITE LUGGAGE FOR TRAVEL

New Oxco filling material prolongs brush life... SAVES YOU MONEY ON BRUSH REPLACEMENT!

It's Oxco's "MASTER BLEND"—a newly developed filling material for Oxco brushes, consisting of pure horsehair and long-wearing SARAN bristles. Backed by over two years of continuous research, this new blend has wearing qualities that will prolong the useful life of your maintenance brushes—save you money on brush replacement costs.

EXTREMELY DURABLE

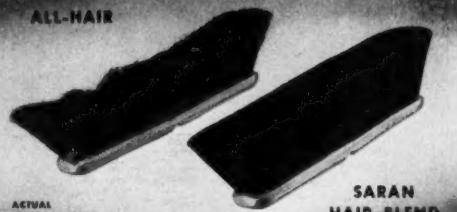
MAT-RESISTANT

RENEWABLE BY WASHING

STABLE SUPPLY AND PRICE

To get complete details and start saving real money on brush replacement costs, contact your nearest Sanitary Supply or Hardware Jobber now. Ask for the brochure on Oxco's "Master Blend".

ALL-HAIR



ACTUAL
UNTOUCHED PHOTO

TESTS conducted in both laboratories and in actual use, prove the extra wearing qualities of the new blend. Photo shows how a "Master Blend" sweep far outlasted an all-horsehair sweep after 500 miles of continuous sweeping over concrete flooring.

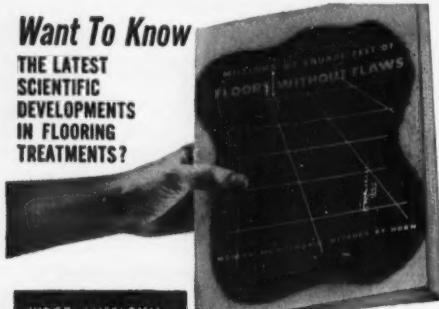


Brushes like BIG CHIEF-X, Oxco's top grade floor sweep, plus other floor sweeps, counter dusters, window brushes, industrial brushes and others are now available with the extra-durable "Master Blend" filling.



Want To Know

THE LATEST
SCIENTIFIC
DEVELOPMENTS
IN FLOORING
TREATMENTS?



WOOD, LINOLEUM,
RUBBER, TERRAZZO,
CONCRETE, TILE,
CORK,
COMPOSITION,
MARBLE

HORN

A. C. HORN CO., INC., Established 1897
10th St. and 44th Ave., Long Island City 1, New York
SE-53
Please send free a copy of your new brochure . . .
"FLOORS WITHOUT FLAWS"

Name _____
Care of _____
Address _____
City _____ State _____



DETERGENT BRICKS AND KLENZADE BRICK FEEDER



KLENZADE PRODUCTS, INC.
Beloit, Wisconsin

Viewlex

FILMSTRIP PROJECTORS



There is no longer any reason to deprive anyone of the benefits of visual instruction. Certainly not a budget reason — because this fine Viewlex Filmstrip projector is so modestly priced that it is easily within the reach of even the most stringent budgetary limitations.

The Viewlex models V-4 and V-44 have been specifically designed for use with filmstrip only — in classroom or auditorium. It has been designed to put your lecture material "across" effectively, effortlessly . . . and INEXPENSIVELY! Even under the most adverse conditions it will give perfect projection.

Look at its many features. Unsurpassed performance and top-notch construction, combined with functional, streamlined design. Clear, sharp projection, brilliant illumination — 2" - 3" - 5" - 7" interchangeable lenses!

Compare the real value of this exceptional projector with its extremely low cost. Decide NOW to use Viewlex for your visual instruction equipment.

FOR REAL
ECONOMY
combined with
PERFECT
PROJECTION

V-4SR
ONLY
\$39.25



Write for descriptive literature — Dept. 14.

Viewlex

INC. • 35-01 QUEENS BOULEVARD • LONG ISLAND CITY 1, N. Y.

VIRCO answers the need for
more durable
school furniture

Even if they come in "like a herd of elephants" — Virco School Furniture can take it! Frames of heavy gauge steel tubing, manufactured to strict specifications in our own tube mill, provide maximum strength and rigidity. Finishes are stain and mar resistant — remain smooth and beautiful through years of punishment. Safe from the student, too — every piece is safe for the student, too — no sharp corners, no snagging or tearing hazards. A triumph of functional modern design!



No. 108 Tablet Arm Chair

- Crescent bracing for extra sturdiness.
- Curved back and saddle seat for correct posture control, made of eastern maple.
- 12" x 24" tablet arm of maple or plastic sheet.
- Legs equipped with rubber-cushion, noiseless steel glides.



2-Pupil Table



Lift Lid Chair Desk



Open Front Desk



Lift Lid Desk



MFG. CORPORATION
15134 South Verment Ave.

Mailing Address: P.O. Box 846, Sta. H, Los Angeles 44, Calif.
Eastern Office: 11 West 42nd Street, New York City



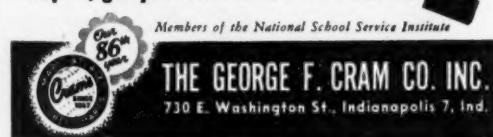
Magic Finish - Mark On - Rub Off

- **MAPS**
- **GLOBES**
- **CHARTS**
- **ATLASSES**

Cram materials make teaching easier. Edited by recognized authorities to fit the mental maturity of the different grade level of pupils.

Be sure to stop in at the convention and let us tell you all about the Cram complete and up-to-date teaching aids.

Stop in, get your **FREE** **Globe Facts Booklet**



35 YEARS OF WORLD LEADERSHIP

CURTAIN CONTROLS AND TRACKS
Vallen

VALLEN
ALL-STEEL
SAFETY
TRACK

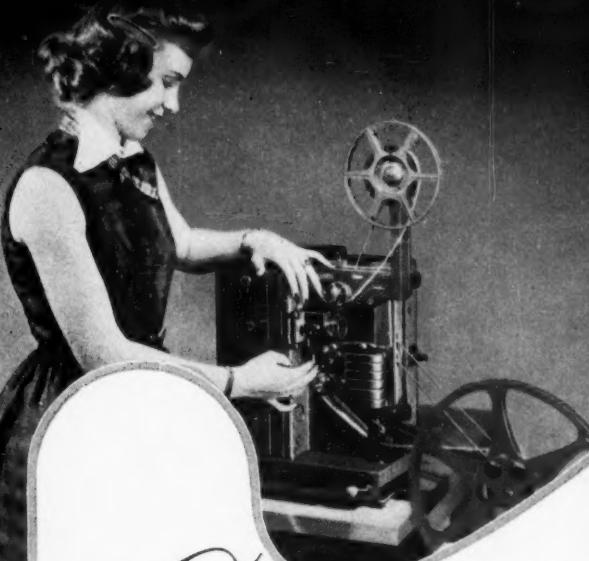
LOW-COST DEPENDABILITY

- Noiseless, Safe, Easy Operation
- Designed to eliminate jamming
- Bearings in the hub of each wheel where they belong for smoothest operation possible.
- Manually or electrically operated

There is a Vallen Electric Control and Track for every need.

WE'RE HEADQUARTERS FOR YOUR PROBLEMS

VALLEN, INC., AKRON 4, OHIO



RCA "400" Projector the thread-easy way to show sound films

Thread-Easy film path makes threading a simple, understandable operation. You can thread it, and put a picture on the screen in seconds. (In tests at a trade show, 473 guests proved you can thread the RCA "400" in less than 30 seconds.)

Gentlest way to handle films

In years to come, you'll appreciate the careful way your RCA "400" projector handles film.

Slow-running sprockets—twice the size of ordinary sprockets—provide a long, gradual curve for film to follow. The thread-easy film path does away with sharp bends which tear or scuff film. It's designed to give you hundreds of first-run showings from every film.

(In actual tests a film—run through the RCA "400" projector 700 times—shows no sign of wear. Splices fail to show any sign of parting after hundreds of passes through the projector.) For careful film handling, tell your RCA Dealer you want the RCA "400" 16mm sound projector.

Check these 6 important advantages
of the RCA "400" Projector

1. Thread-Easy film path for 30-second threading
2. Low-speed induction motor for quiet operation
3. Floating sprockets for gentle film handling
4. Husky motor, nylon gears for long-term dependability
5. Simplified design for 2-minute set-up, 3-minute pack-up
6. RCA-engineered sound system for superb reproduction

For more information MAIL COUPON NOW



VISUAL PRODUCTS

RADIO CORPORATION OF AMERICA
ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N. J.

In Canada: RCA VICTOR Company Limited, Montreal

Visual Products, Dept. 109N
Radio Corporation of America, Camden, N. J.

Please send me your new, free booklet, *RCA "400" Senior and Junior Sound Film Projectors*.

Name _____

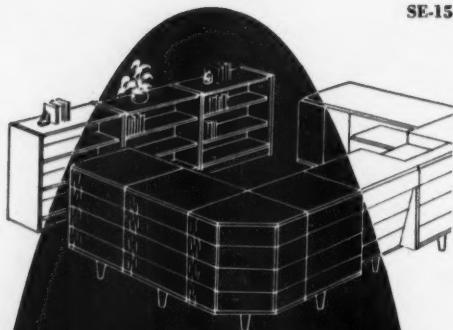
Title _____

Organization _____

Address _____

City _____ Zone _____ State _____





SE-154

CRAFTSMANSHIP
defines the difference
between the superior
and the average
a distinction dramatized
in the making of
Sjostrom NEW LIFE
Library Furniture.

Skilled craftsmen of Sjostrom
combine knowledge and experience
with modern principles of design
to create NEW LIFE
beautiful yet efficient
graceful yet sturdy
attractive yet practical
for the modern library.

JOHN E. SJÖSTRÖM COMPANY
1717 N. TENTH ST., PHILADELPHIA 22, PA.
Established 1893

For complete
information on
Sjostrom NEW LIFE
Library Furniture,
write for
Catalog L-50

SE-155
Stop Slamming Doors!

KANT-SLAM Door Check Closes



\$9.95

Slamming . . . Bumping . . .
Broken Door Glass . . . Insects
. . . Drafts . . . Heat Loss

DELIVERED
THOUSANDS IN EVERY STATE
IN U. S.
SCHOOLS, HOSPITALS,
FACTORIES,
WAREHOUSES,
OFFICES,
INSTITUTIONS,
PUBLIC BUILDINGS
ATTRACTIVE,
DARK BRONZE,
METALLIC LACQUER
FINISH-HAMMERED
BRONZE EFFECT.

KANT-SLAM closes doors with efficiency of
human hand. Hydraulic action—NOT an air
check—piston works in oil. 3 years trouble-
free service guaranteed. Price about half of
other hydraulic controls.

Works any place along hinge side of door—
top, middle or bottom—either right or left
hand doors. KANT-SLAM is completely self-
contained—door and hinges are absolutely
free of any strain or pressure. Holds door open
when past 90 degrees.

Only one size Check required—three sizes
easily detachable springs available
for various size doors. Simple screw
adjustment for closing speed.

Order on 30 Days FREE TRIAL

Kant-Slam Door Check Co.

126 W. Spring St. • Bloomfield, Indiana



SE-156

BURKE-BUILT
PLAYGROUND EQUIPMENT
Kindergarten and
Nursery School
Play Devices

UNMATCHED
for
SAFETY, DURABILITY
and
LOW COST MAINTENANCE

Compare the massive, heavily ribbed,
greater length fittings of hot dipped
galvanized iron with the interlocking
knob construction against any other.
Consider such BURKE-BUILT ex-
clusives as the popular Climb-a-
Round, Hobby-Horse Swing Set and
many others.

For complete illustrated catalog, price
list or Free Playground Planning Aid
booklet, Write Dept. A

THE J. E. BURKE CO., Fond du Lac, Wis.
Factory Branch Box 986 New Brunswick, N. J.

A SOUND INVESTMENT
IN
CHILD HAPPINESS

**YOU ARE
CORDIALLY
INVITED
to our
EXHIBIT
at the
A. A. S. A.
CONVENTION
SPACE No. I-35
Atlantic City
Feb. 14-19**



Maintenance Superintendent M.R.K. reports—

"we **SAVED 68%** on
man hours with Aluminum Alloy
"UP-RIGHT" SCAFFOLDS



MOBILE 10 ft. or 6 ft. SPAN UP-RIGHT SCAFFOLD. Bridges obstacles with ease. Instantly adjustable to desired height. Takes only 1 minute to erect.

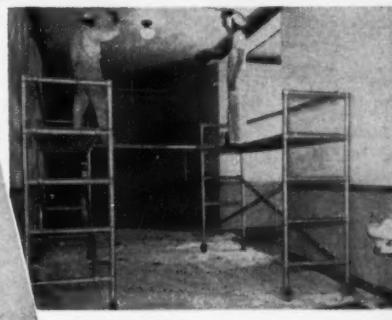


STAIRWAYS are taken in stride by an Up-Right Scaffold. Legs are instantly adjustable for perfect levelling of platform.

M. R. K. adds . . . (Name on request)
"Our overhead building and classroom maintenance is accomplished more efficiently and in far less time, thanks to Up-Right's mobility and rapid assembly!"

**NEW, FASTER,
SAFER WAY
TO GET UP IN THE
AIR & ROLL WITH
THE JOB**

School officials and maintenance superintendents report that savings on even single installations or maintenance jobs more than pay for **UP-RIGHT SCAFFOLDS!** Rolled easily from position to position. Stronger than structural steel yet one third the weight. No wrenches, wing nuts, bolts or loose parts.



LARGE AREAS can be painted in far less time by bridging between 2 span-scaffolds and moving them simultaneously.

Write for
Descriptive Circular

UP-RIGHT SCAFFOLDS

DEPT. 132 - 1013 PARDEE ST. - BERKELEY, CALIF.

FACTORIES: Berkeley, Cal. • Teterboro, N. J.

• OFFICES IN ALL PRINCIPAL CITIES •

**Mobile
TOWER
SCAFFOLDS**

up to 45 ft. or higher take
only 1 to 15 minutes to
erect. Available in de-
sired number of 6
ft. section units.

No "Maybe" Gravy for Me!
I use KITCHEN BOUQUET
for RICH BROWN
DELICIOUS GRAVY!

FREE! "QUANTITY RECIPE" CARDS
 and 4-oz. Bottle Of
 KITCHEN BOUQUET

Just drop a post card to: Kitchen Bouquet,
 Grocery Store Products Co., Dept. SE-2,
 West Chester, Pa.

Available in pts., qts. and gals. For 2-oz.
 and 4-oz. sizes, see your grocer.

SE-157
EVEN simple meals make a hit when gravy is rich brown and delicious—Kitchen Bouquet gravy. This unique blend of 14 garden-fresh vegetables, herbs and spices adds no artificial flavor. Used by good cooks and chefs for 75 years to bring out *true* meat taste and give gravy an appetizing, deep brown color.

Here's another tip: you'll save meat-shrinkage—get extra servings—by slow-roasting at 300°F. For rich brown crust, brush the meat, before roasting, with Kitchen Bouquet.

Always use Kitchen Bouquet to get the most flavorful meat and gravy at only a fraction of a penny per serving.

SERVE BOTH THESE FAVORITE FOODS



Bin-B *The Mushrooms already
 Broiled in Butter*
 Packed 3 ways for every mushroom use;
 Whole Crowns (in 6 and 3-oz. cans),
 Sliced, and Chopped (in 3-oz. cans).
 Broiled in pure creamy butter before
 they're packed.

**CREAM OF
 RICE**

**NEW, ½ Minute
 Cooking Time—10 Times Faster!
 NEW, Easy-Pouring Spout!**

2 new features for this easy-to-digest,
 quick-energy cereal that child specialists
 recommend.



SE-159

NEUBAUER
 "TWIN-POST"
Gym
BASKET RACK

U.S. Pat. No. 2,621,800

**Rigid Corner Posts—
 Safer Recessed Hasps**

The Neubauer "TWIN-POST" corners are actually 2 posts with 3 strong corners (see inner circle). They keep the whole basket rack rigid and in line.

Note below how dividers guide and separate baskets and how hasp and padlock are neatly recessed *inside* shelf edge. Eliminates danger of cuts and bruises.

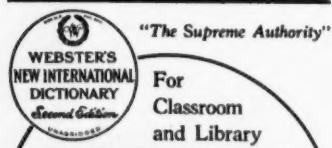
We also make Neubauer "Twin-Post" shelving in range of sizes. Write for literature.

Inquiries invited from school supply dealers.

NEUBAUER MFG. CO.

2015 Central Ave.
 Minneapolis 18, Minnesota

172



"The Supreme Authority"

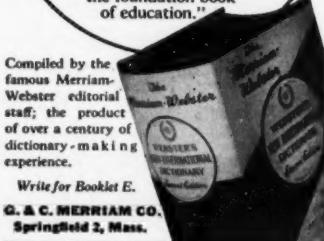
For
 Classroom
 and Library

Encyclopedic: information on every subject, at your finger tips; 600,000 entries, 12,000 illustrations.
Up to date: the only entirely revised and rewritten unabridged dictionary in 25 years.

Economical: the acquisition of Webster's New International Dictionary lessens the need for investment in supplementary reference books. It is truly "the foundation book of education."

Compiled by the famous Merriam-Webster editorial staff; the product of over a century of dictionary-making experience.

Write for Booklet E.
G. & C. MERRIAM CO.
 Springfield 2, Mass.



THE SCHOOL EXECUTIVE

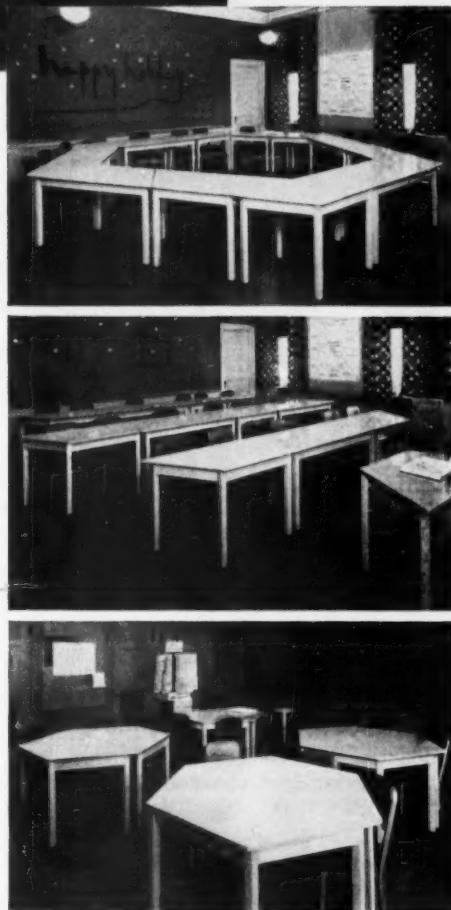


NATIONAL
Line of
MODULAR
SCHOOL
FURNITURE

Multi-mode Tables Now In Use At Columbia University Teachers College

The problem of adequate classroom furniture for group activities has been solved wherever the National Multi-mode table has been adopted. As shown in the photographs, Columbia University Teachers College takes full advantage of the flexibility permitted by these tables to meet any teaching situation. They lend themselves to an infinite variety of group arrangements and can be placed as needed in a matter of minutes.

The National Multi-mode table has a NATCOLITE laminated plastic top in wood-grain patterns specially developed for low light reflectance. It is made in four standard heights: 20, 23, 26 and 29-inch.



NATIONAL SCHOOL FURNITURE COMPANY
Division of National Store Fixture Co., Inc. • ODENTON, MARYLAND

BETTER LEARNING DEMANDS MODERN SOUND CONTROL



If a stream of water is channeled across a field of dry gravel, only a trickle will reach the other side. Likewise, printed words in text books and words spoken in the classroom cannot reach their destination effectively if the meaning is drained by distracting noise.

Better Learning Demands Modern Sound Control.

FIR-TEX Perforated Acoustical Tile is a finer material for sound control in classrooms, libraries, gyms and auditoriums—engineered for easy, economical installation and maintenance. **FIR-TEX** Perforated Acoustical Tile traps noise like a blotter soaks up ink.

FIR-TEX Perforated Acoustical Tile is made of strong, tough wood fibers, felted together and pressed into a rigid tile in such a way as to preserve the natural air cells within the fibers and add millions more sound-absorbing cells between fibers. Exposed surface is then perforated for even greater sound absorption.

FIR-TEX Perforated Acoustical Tile is available with ivory or white finish for maximum light reflection.

Learn more about the advantages of **FIR-TEX Perforated Acoustical Tile from your architect**

General Sales Office
DANT & RUSSELL SALES CO.
Equitable Bldg., Portland, Ore.

Eastern Sales Office
DANT & RUSSELL SALES CO.
8 So. Michigan Ave., Chicago, Ill.

The Mayline School Line Tops the Field

This Drafting and Art Classroom Table is one of many fine products.



DOUBLE WORK BENCH



A proud addition to any wood shop. Thick, hard Maple top, solid oak base — natural finish, rapid acting vise. Also available as a single work bench.

ALL PRODUCTS SOLD DIRECTLY TO SCHOOLS

ENGINEERING MANUFACTURING CO.

609 No. Commerce St. • Sheboygan, Wis.



MAYLINE

DAV-SON

"TELL-ALL"

Bulletin & Directory Boards
A Style And Size
For Every Need

DAV-SON Cork Back Bulletin Boards
For Pinning Up Announcements,
Photographs, Letters, etc.

- Indoor and Outdoor Styles
- Hardwood or Metal Frames
- With or Without Locking Glass Doors
- Many Sizes in Stock



DAV-SON Changeable Letter
Directories For Lobby, Office
or Outdoor Use.

- Wide Variety of Styles and Sizes
- Glass Enclosed Front
- Hardwood or Metal Frames
- Highest Quality Felt Background in
Choice of Several Colors
- Many Letter Styles and Sizes



DAV-SON Name Plates For
Desk, Door or Wall Mounting
• Choice of Matching Wood Bases
• Names May Be Changed at Low Cost

WRITE TODAY FOR FULL
PARTICULARS AND PRICES



A.C. DAVENPORT & SON., INC.
ESTABLISHED 1923
311 N. DESPLAINES ST., CHICAGO 6, ILL.

MANUFACTURERS OF BULLETIN BOARDS FOR EVERY NEED

Remarkable new table makes classroom space doubly useful!



Provides machines for two students, work space for two more. No need for a separate row of cabinets. The new SINGER Table makes it possible, even in limited space, to have two machines (full-sized, smooth-stitching SINGER Machines) for every four students. Above: Tables ready for use in classroom of sewing teacher Marie C. Hughes at Battin High School, Elizabeth, N. J.



Converts to a smooth-surface work table in a jiffy! No need to take up space (or expense) with separate cutting tables. Simply lower machines into the SINGER* Table—slip removable panels back into place—and you have a smooth, continuous cutting and work surface. Specially useful if your room has to be used for other classes, or as a study hall.

The new SINGER Combination Sewing and Cutting Table

Designed to meet the special requirements of sewing classrooms!

The new SINGER Table was developed specifically for schools at the suggestion of Dr. Anna M. Dooley, representing the New York City Board of Education. It has every de luxe feature to make your classroom more efficient, your teaching easier!

- 5-ply construction. Durable Masonite top. Solid birch legs.
- 4 handy drawers.

- Built-in knee levers.
- Dustproof shields which completely enclose machines when they are lowered into table.
- Tamper-proof locks on panels.
- Provision for adding automatic switch to cut off power when machines are lowered.
- Size 60" x 42" x 30".

Available—with any of the 3 regular SINGER* Sewing Machine classroom heads—at a special school discount.



* **DON'T BE MISLED!** SINGER sells and services its products only through SINGER SEWING CENTERS, identified by the Red "S" Trade Mark on the window, and listed in your classified telephone directory only under SINGER SEWING MACHINE COMPANY.

Free Folder on Request. SINGER will send you, or any member of your Home Economics Department, a folder giving complete specifications of the table and suggested classroom layouts. Just mail this coupon.

SINGER SEWING MACHINE CO.
Educational Dept., 149 Broadway, New York 6, N. Y.

Please send folder giving details about Combination Sewing and Cutting Table, and showing suggested classroom layouts.

Name _____
Position _____
School _____ County _____
Street _____
City _____ Zone _____ State _____

SINGER SEWING CENTERS

THERE'S ONE NEAR YOUR SCHOOL

*A Trade Mark of THE SINGER MANUFACTURING COMPANY.

Copyright, U.S.A., 1952, by THE SINGER MANUFACTURING COMPANY. All rights reserved for all countries.

WILLRED

is proud to present its new, complete line of

SCHOOLROOM FURNITURE,

scientifically designed to meet the most rigid specifications set forth by America's leading educators.

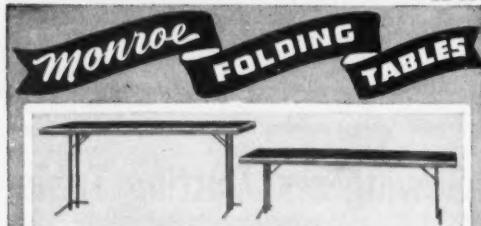
Each Willred unit embodies perfection of Design, Materials and Construction, resulting in functional, sturdy furniture that withstands wear and abuse over a longer period.

It will pay you to look into the value and economy of the Willred line.

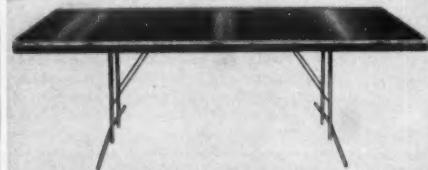
WILLRED COMPANY

Foot of Pacific Street, Newark, N. J.

SE-164



**ADJUSTABLE HEIGHT TABLES
ANY HEIGHT—30 TO 20 INCHES
DIRECT PRICES TO INSTITUTIONS**
Ask for catalog showing 54 different sizes and types of Monroe tables.



MONROE FOLDING CAFETERIA TABLES
Available in standard heights of 30 inches, or special fixed heights, 20 inches and up.

WRITE FOR CATALOG & DISCOUNTS

THE Monroe COMPANY
66 CHURCH STREET COLFAX, IOWA

SE-165

The New ADC

SPANOTRAC

Exceptional, light-to-medium duty drapery track — sturdy, durable, expertly engineered — specifically designed for . . .

- Darkening drapes in Audio-Visual Class-rooms
- Partitioning class-rooms in schools, churches & other in-stitutions



Track and Carrier Assembly

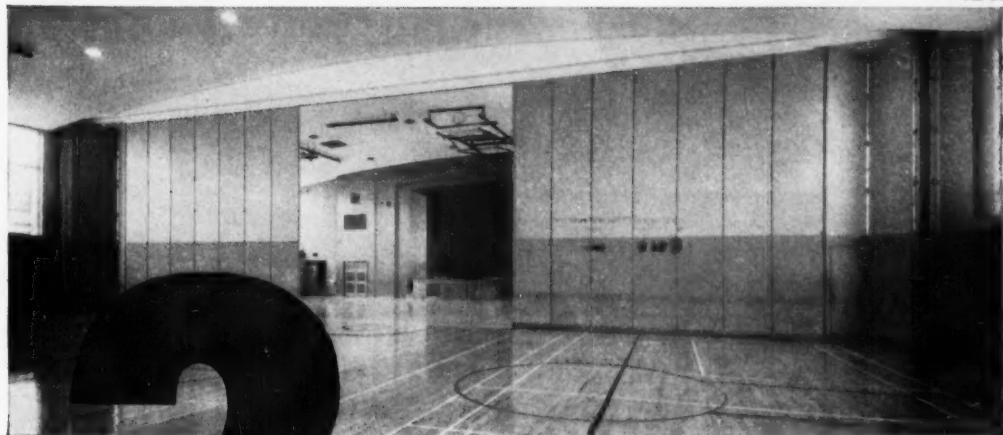
SPANOTRAC is available in aluminum or magnesium. Track shape size is approximately 1" x 1". SPANOTRAC is installed single, in one section, and is recommended for use with light-to-medium weight curtains, not to exceed 20 feet in length. Characteristic ADC quality features throughout.

Write For Details and Price Information

AUTOMATIC DEVICES CO.

116 N. 8th Street • Allentown, Pa.

"We Support the Most Celebrated Curtains in the World"



3 gyms in one!



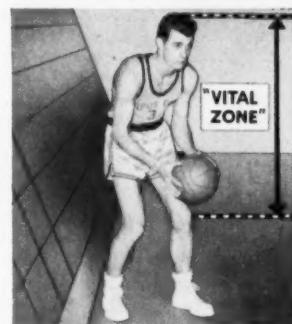
■ Triple your gym facilities with Horn folding gymseats and partitions! Extend the seats, fold the electrically operated partitions —you have an exhibition gym that pays its way. Fold the seats easily to a smooth sloping surface, extend the partitions—you have two ample practice gyms.

Horn equipment is designed to use your space efficiently, is constructed to give you long trouble-free service.

Your local Horn representative is ready to help plan your gym for maximum use. Horn factory crews will supervise installation of equipment.

Write today for details on Horn folding gymseats and folding partitions . . . and the new Horn wardrobes and folding stages.

HORN BROTHERS
SCHOOL EQUIPMENT DIVISION OF
THE BRUNSWICK-BALKE-COLLENDER COMPANY
FORT DODGE, IOWA



FOR SAFETY, plan with HORN! Horn folding gymseats provide a smooth, sloping surface when folded . . . real protection for the vital zone!

Portrait of Locker Security

NATIONAL LOCK
combination, self-locking
SHACKLE LOCKS

brighten your locker picture

Double steel case . . . extra-strong shackle . . . rugged construction throughout. These National Lock shackle lock features assure you of complete locker security. • You're assured, too, of simplified locker control. With each order you receive free record charts, designed for systematic locker administration. With each order of 100 or more National Lock shackle locks, a distinctive leatherette binder is included. • Write us on your school letterhead for free sample lock.



NO. 68-265
 (Not Masterkeyed)



NATIONAL LOCK COMPANY
 Rockford, Illinois • Lock Division

Cut Your Dining Equipment Costs



with



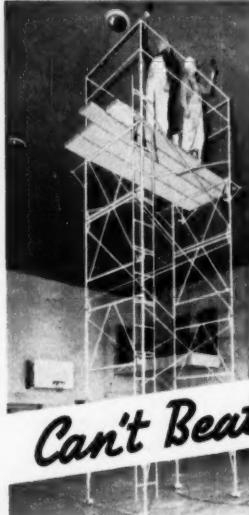
Hostess
FOLDING
BANQUET TABLES
& BENCHES

FREE FOLDER Write for new, full-color folder showing complete line of Hostess Folding Benches and Banquet Tables.

THE BREWER-TITCHENER CORPORATION, Cortland, N.Y.

• Now—there's no reason to operate with inadequate dining facilities! Buy BTC Hostess Banquet tables—and inexpensive BTC Benches when your budget prevents the purchase of chairs.

These sturdy benches and tables are built for long years of use—feature an all-steel frame that's finished in handsome Taupe color. Legs fold two at a time for quick set-up and take-down. Table available with rich Plywood, smart Tauplon or colorful Formica top. Tables for 8 or 10 persons; benches seating 4 or 5.



Versatile Safway Scaffolding is efficient for elevated maintenance in every part of school buildings. Interchangeable parts are quickly assembled to provide safe, convenient work platforms for desired locations.

When erected as towers with casters, Safway Scaffolds can follow the work in washing or painting corridors, cleaning and replacing lights, etc. Base sections straddle aisles, desks and equipment.

Dismantling and storage are equally simple, and parts may be re-used indefinitely in other forms. Learn how you can handle overhead maintenance faster, better . . . and safer . . . with Safway Scaffolds.

Can't Beat It for Efficiency

MADE BY THE MAKERS OF FAMOUS SAFWAY PORTABLE AND PERMANENT STEEL BLEACHERS; RENTED AND SOLD by distributors everywhere.

Write for
 this FREE
 Bulletin



SAFWAY
 STEEL PRODUCTS
 INCORPORATED
 6230 West State St.
 MILWAUKEE 13, WIS.
 Manufacturers of Tubular Steel Scaffolding and Equipment.

School Equipment Index—February, 1953

This index covers products and services referred to in both advertisements and editorial reviews in this issue. To find a particular advertisement or editorial listing, consult the key (SE number) which precedes the listing, and which will also be found above the advertisement or listing in the body of the magazine.

If further information concerning any of these products is desired, it will be sent without charge or obligation. Simply circle the identifying numbers on the back of the business reply card below and mail it to us.

SE PRODUCTS

- 1—Pittsburgh Plate Glass Color Dynamics Paint System
- 2—Multi-Clean Maintenance Products
- 3—Nesbitt Unit Ventilators
- 4—Finnell Polisher-Scrubber
- 5—Heywood-Wakefield Tubular Steel Furniture
- 6—Acorn Folding Gates
- 7—Adams & Westlake Aluminum Windows
- 8—Chevrolet School Bus Chassis
- 9—Brunswick - Balke - Collender School Furniture
- 10—Medart Telescopic Gym Seats
- 11—American Boidform Upholstered Chairs
- 12—Herman Nelson Draft/Stop System of Heating and Ventilation
- 13—Brush Soundmirror Tape Recording Equipment
- 14—Wasco Skydomes
- 15—The 1953 Encyclopedia Americana
- 16—Snyder Beatty Railway Grandstand Bleachers
- 17—Duracote Dura-Decor Fabrics
- 18—Pittsburgh Corning Glass Block Panels
- 19—Claridge Vera-A-Tilt Chalkboards
- 20—Crouse-Hinds Floodlights
- 21—American City Bureau Fund-Raising Campaigns
- 22—Loxit Chalkboards
- 23—Powers Control Valves for Heating and Air Conditioning
- 24—Universal Roll-A-Way Stands
- 25—Loxit Floor Laying System
- 26—Solar Steel for School Shops
- 27—S. C. Johnson's Floor Cleaners
- 28—Warren Webster Steam Heating System
- 29—Griggs School Seating
- 30—Formica Surfaces
- 31—American Cyanamid Melmac Dinnerware
- 32—Presto Recording Discs
- 33—Aluminum Wear-Ever Cooking Utensils
- 34—IBM Electric Typewriters
- 35—Schieber Folding Tables, Benches
- 36—Churchill Floor Maintenance Machines
- 37—American Playground Equipment
- 38—Irwin Seating
- 40—Acousti-Celotex Sound Conditioning
- 41—Johnson Plastic Tops
- 42—Barber-Colman Wardrobe Door
- 43—Huntington Floor Maintenance Products
- 44—G-E Projection Lamps
- 45—Blodgett Ovens
- 46—Victor 16mm Projectors
- 47—American Bitumuls Playground Surfacing
- 48—Fibresin Desk Tops
- 49—Tolerton Woodworking Benches
- 50—Universal Industries Vegetable and Potato Peeler
- 51—Universal Industries Vegetable and Potato Peeler
- 52—Revere Tape Recorders

SE

- 53—Universal Dishwashing Equipment
- 54—Rowles School Equipment
- 55—Michaels Display Cases
- 56—Curtis Fluorescent Luminaires
- 57—Haldeman - Langford Fold-A-Way Tables
- 58—American Desk Airplane Tables
- 59—Tennant Floor Machine
- 60—West Floor Preservation Plan
- 61—Berlin Chapman Steel Grandstands
- 62—Shwayder Samson Folding Chairs
- 63—Nelson Classroom Wardrobes
- 64—Viewlex Filmstrip Projectors
- 65—Luminall Paints
- 66—RCA 400 Projectors
- 67—Solar-Sturgen Self-Closing Waste Receptacles
- 68—Mastic Tile Flooring
- 69—Sperti-Faraday Fire Alarm Systems
- 70—Bradley Washmountains
- 71—Boonton Melmac Dinnerware
- 72—National Hand, Hair Dryer
- 73—GoldE Slide Projectors
- 74—Vacuum Can Hot Liquid Containers
- 75—Lowerator China Dispensers
- 76—School Interiors Stack Chairs, Tables, Desks
- 77—Science Kits
- 78—Heinz Condensed Soups
- 79—Up-Right Scaffolds
- 80—Oneida School Bus Bodies
- 81—National Modular Line of School Furniture
- 82—Wayne School Bus Bodies
- 83—Singer Cutting and Sewing Table

SE

- 84—Stacor Steel Drawing Tables
- 85—Horn Folding Gymseats
- 86—Manley Popcorn Machines
- 87—Keweenaw Wood Laboratory Equipment
- 88—Johns-Manville Acoustical Ceilings
- 89—Duke Thurmaduke Waterless Food Warmer
- 90—Dictaphone Dictating Machine
- 91—Da-Lite Projection Screen
- 92—Sexauer Faucet Washers
- 93—Ditto Liquid Duplicators
- 94—Fibresin Desk Tops
- 95—Brotherhood Mutual Life Insurance Tours
- 96—Beckley-Cardy Supertex Window Shades
- 97—Fuller Floor Brushes
- 98—Strong Spotlights
- 99—Executive Intercommunication Systems
- 100—Breuer Floor Machine, Vacuum Cleaner
- 102—Draper Roller Shades
- 103—Electric-Aire Hand Dryers
- 104—Endur Green Resurfacer for Blackboards
- 105—Western Exterior Waterproofing
- 106—White Mop Wringers
- 107—Wyandotte Cleaning Products
- 108—Nestle Maggi Seasoning, Granulated Bouillon Cubes
- 109—Geepres Wringers
- 110—P. O. Moore Telkee Key Control
- 111—Toro Mowers

FIRST CLASS
Permit No. 280
(Sec. 310 P. L. & R.)
New York, N.Y.

BUSINESS REPLY CARD
No Postage Stamp Necessary if Mailed in the United States

2c POSTAGE WILL BE PAID BY

THE SCHOOL EXECUTIVE

470 FOURTH AVENUE

NEW YORK 16, N. Y.



SE

112—Ajusto Automatic Adjustable Chairs, Stools
 113—Flour City Yarn Brushes
 114—American Products Projector Stand
 115—Baker Scaffolds
 116—Keyes Molded Plastic Tableware, Trays
 117—National Box and Can Filing Cases
 118—Dudley Locker Locks
 119—Nathan Strans-Duparquet School Supplies, Equipment
 120—A. B. Dick School Duplicators
 121—Audio Devices, Audiotape
 122—Master Combination Locks
 123—Hanover Folding Tables
 125—Levitt Bleachers
 126—International Molded Arrowhead Cafeteria Trays
 127—Birillo Steel Wool Floor Pads
 128—Rauland-Borg Sound System
 129—Playtime Bleachers
 130—Wayne Rolling Gymstands
 131—United World Films on Zoology
 132—Gouger Keyless Locks
 133—U. S. Plywood Armory Chalkboard
 134—Clebar Stop Watches
 135—Bassick Rubber Cushion Glides
 136—Tomlinson Dormitory Furniture
 137—Old Town Spirit Duplicating Machine
 138—Hussey Bleachers, Grandstands
 139—Commons Electronic Organ
 140—Eberhard Faber Pencils
 141—Legge Maintenance Products
 142—Rek-O-Kut Phonographs
 143—Ox Fibre Brushes
 144—A. C. Horn Flooring Treatments
 145—Klenzade Detergent Bricks, Brick Feeder
 146—Penn Slate Chalkboards
 147—L. Peterson Laboratory, Library, Vocational Furniture
 148—Cram Maps, Globes, Charts, Atlases
 149—Vallen Curtain Controls and Tracks
 150—Virco School Furniture
 151—Kent Floor Machines
 152—Claridge Duracite Chalkboards
 153—American School and University, 1952-53
 154—Sjostrom Library Furniture
 155—Kant-Siam Door Checks
 156—Burke Playground Equipment

SE

157—Grocery Store Kitchen Bouquet
 158—Neubauer Gym Basket Racks
 159—G. & C. Merriam Webster's New International Dictionary
 160—Dant & Russell Perforated Acoustical Tile
 161—Engineering Mfg. Mayline Work Bench
 162—Davenport Bulletin & Directory Boards
 163—Willard Schoolroom Furniture
 164—Monroe Folding Cafeteria Tables
 165—Automatic Devices Drapery Track
 166—National Combination Shackle Locks
 167—Brewer-Titchener Folding Banquet Tables, Benches
 168—Safway Scaffolding
 169—Virco Folding Chairs
 170—Gravely Tractors
 171—Spencer Vacuums
 172—Boston Pencil Sharpeners
 173—Daintex Counting Frame
 174—Neumade Film Strip Cabinets
 175—Pereny Electric Kilns
 176—Pittsburgh Cyclorama Track
 177—Norcor Tubular Desks and Chairs
 178—American Standard Mops
 179—Cincinnati Ornamental Iron Work
 180—Ionia Folding Chairs
 181—Hotel Plymouth
 182—Our Schools reprint
 183—National Cornice Electric Food Carts
 184—Mitchell Folding Tables, Stands
 185—Richard Best Tryex Pencils
 186—Allied Radio-TV Catalog
 187—Automatic Pencil Sharpeners
 188—Stratel Towels, Tissues
 189—Standard Projectors
 190—Peninsular Desk-Chair Unit
 191—Naden Electric Scoreboards
 192—Holden Book Covers
 193—Eagle Traffic Control Signals
 194—Superior Electric Dimming Equipment
 195—E. R. Moore Choral Gowns
 196—Newcomb Sound Equipment
 201—Interstate Typing Tables
 202—Cement Enamel
 203—Motigraph School Television
 204—Cutler Cold Cathode Fixture
 205—Norcor Folding Chair

SE

206—Hollingshead Floor Wax
 207—Universal Dishwashing Booster Unit
 208—National Box and Can Transfer File Cases
 209—Flexible School Bus
 210—Califone Transcription Player
 211—Tolerton Drawing Table
 212—Eastman Kodak Junior Microfilmer
 213—North American Philips Spectrometer
 214—Sweden Continuous Freezer
 215—Lawrence Aluminum Sand Urns
 216—Coffey Filmstrip Wall File
 217—Beckley-Cardy Cork Bulletin Boards
 218—Plumb Torque-Limiting Wrench
 219—Curtis Calculator
 220—South Bend Indexing Centers
 221—A. M. Brooks Hearing Aid
 222—Hollywood Amateur Theatricals Kit
 223—Bready Snow Plow
 224—Dodge School Bus Chassis
 225—Fielden Electrical Indicator
 226—American Crayon Fluorescent Chalks
 227—Bloomfield Stainless Steel Knives
 228—Nuclear Scaler for Radio Lab Work
 229—Holab Masonry Drill
 230—American Optical Slide Projector
 231—Gerson-Stewart Floor Wax
 232—Foley-Irish Silver Washer, Drier
 233—Symmons Washing Machine Valve
 234—Microchemical Micro Centrifuge
 235—Doyle Vacuum Cleaners
 236—Weber Addressing Machine
 237—Gouger Keyless Lock
 238—Foldcraft Folding Table
 239—Microchemical Automatic Fraction Collector
 240—Nuclear Scintillation Detector
 241—Can-Pro Football Uniform Bag

AUDIO-VISUAL AIDS

301—A Walk in the Sun (Associated Films)
 302—Utica Forge Film on Forging Metal
 303—Jam Handy Primary Science Filmstrips
 304—Audio Historical Recordings
 305—Mahnke Guidance Film
 306—SVB Filmstrip-Slide Folder
 307—Coronet Prehistoric Times Film
 308—British Information Services Film on Queen Maud Land
 309—United World Film List

MANUFACTURERS' CATALOGS

310—Graubard's Patrol Equipment
 311—Ludwig Photo-Copier
 312—Ludowici-Celadon Roofing Tile
 313—Virginia Metal Products Steel Fire Partitions
 314—Otis Elevators
 315—Fisher Scientific Atom Models
 316—Goodyear Folder on Painting Concrete Floors
 317—Sindar Soap
 318—Mills Movable Walls
 319—Sears, Roebuck Musical Instruments
 320—Clark Vacuum Cleaners
 321—Hub Stage Lighting

NEW TEXTBOOKS

322—Biography of Alexander Hamilton (McGraw-Hill)
 323—Understanding Our Free Economy (D. Van Nostrand)
 324—Music for Early Childhood (Silver Burdett)
 325—Enjoying English (L. W. Singer)
 326—Mutiny on the Bounty (Globe Book Co.)
 327—Burgess Business Law (Lyons & Carnahan)
 328—Bobbs-Merrill Textbook Catalog

THE SCHOOL EXECUTIVE
 SCHOOL EQUIPMENT NEWS, 470 Fourth Ave., New York 16

February, 1953

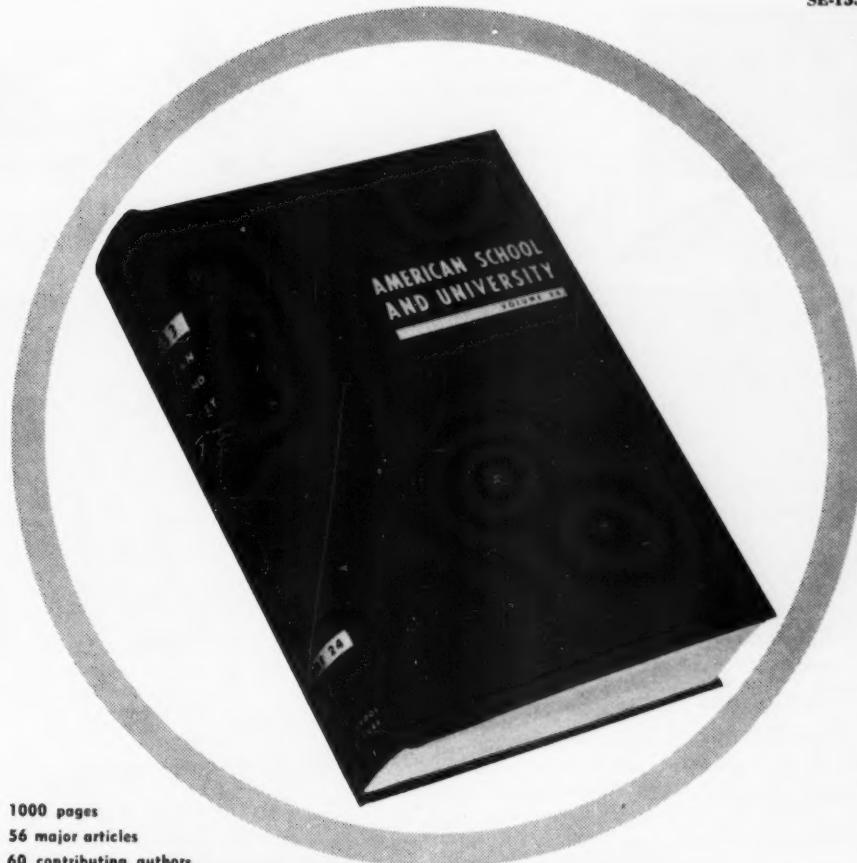
Please send me the manufacturers' literature for the numbers I have circled below on the understanding that it will be sent without charge or obligation.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82
84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
100	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116
117	118	119	120	121	122	123	125	126	127	128	129	130	131	132	
133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148
149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	
164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179
180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	
195	196	201	202	203	204	205	206	207	208	209	210	211	212	213	214
215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	
230	231	232	233	234	235	236	237	238	239	240	241	241	301	302	303
305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	
320	321	322	323	324	325	326	327	328							

Please send me a copy of THE AMERICAN SCHOOL AND UNIVERSITY and bill me \$5.00.

Also send literature on

NAME _____ POSITION _____
 INSTITUTION _____
 ADDRESS _____



- 1000 pages
- 56 major articles
- 60 contributing authors

Linking the PRESENT with the FUTURE...

AMERICAN SCHOOL AND UNIVERSITY

is your immediate, comprehensive and authoritative source book on all aspects of school plant design, construction, equipment and operation.

If you are planning a new school, you will want the 1952-53 edition of AMERICAN SCHOOL AND UNIVERSITY for constant reference in conferences with architects and committees, and for study.

In the selection and purchase of

equipment and supplies, its 600 cross-indexed pages of manufacturers' catalogs give you finger-tip where-to-purchase information covering the whole range of school and college needs.

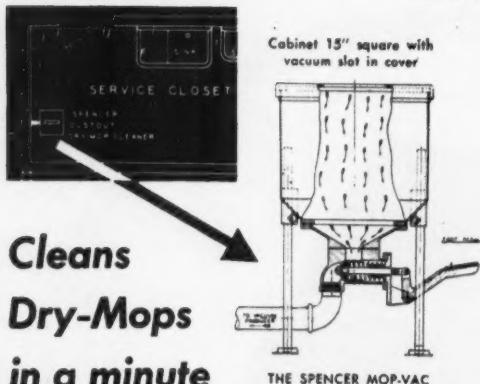
You will find it invaluable, too, for up-to-the-minute answers to problems of operation and maintenance.

Let AMERICAN SCHOOL AND UNIVERSITY help you *PLAN*—and help you *NOW*.

Just clip, fill in and mail the handy Business Reply Card on the opposite page.

AMERICAN SCHOOL PUBLISHING CORP., 470 Fourth Ave., N. Y. 16, N. Y.

**\$5.00
per copy.
Place your
order today.**



Cleans

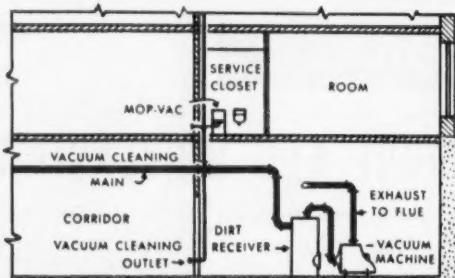
Dry-Mops

in a minute

... ANYWHERE

The only sanitary way to clean a dry-mop or dust cloth is to let Spencer Vacuum clean it for you. Just pass the mop over a vacuum slot attached to the Spencer System at a baseboard, flush with the floor, or on the top of a cabinet in a service closet. The strands are immediately agitated by the violent rush of air. All dust goes down enclosed pipes to the basement. Fewer steps, more frequent cleaning—and no possibility of germ-laden dust being spread over the hospital.

SIX TYPES Cabinet units are made in the open type illustrated above and in high and low enclosed cabinets. Special attachments are available for baseboard or flush floor mounting and for Spencer Portable Cleaners.



with SPENCER STATIONARY VACUUM SYSTEM: The sketch above shows how the Spencer Vacuum producer and dirt separator are located in the basement and connected to vacuum fixtures on all floors for cleaning of floors, bedding, furniture and equipment of all kinds.

The Spencer Mop-Vac is described in Bulletin No. 138-C and the Stationary System in Bulletin No. 33.

THE SPENCER TURBINE COMPANY • HARTFORD 6, CONNECTICUT

SPENCER
HARTFORD

450-C

rugged strength

virco

all steel folding chairs



The tubular steel frame and one-piece formed steel seat of this new Virco Folding Chair can withstand years of punishment. Enclosed hinges are smooth, chip-proof finish assure snag-free, pinch-free comfort. Contour-shaped for easy sitting. Conveniently lightweight. Available also with formed plywood and leatherette upholstered seats. Write for free catalog.

DEALERS NOTE: Some areas still available for qualified dealers. Write for information.

IRCO MFG. CORPORATION
15134 SOUTH VERMONT AVE.

MAILING ADDRESS: P. O. Box 846, Station H, Los Angeles 44, Calif.
EASTERN OFFICE: 11 West 42nd Street, New York 36, New York

the GRAVELY does more School Jobs Better!

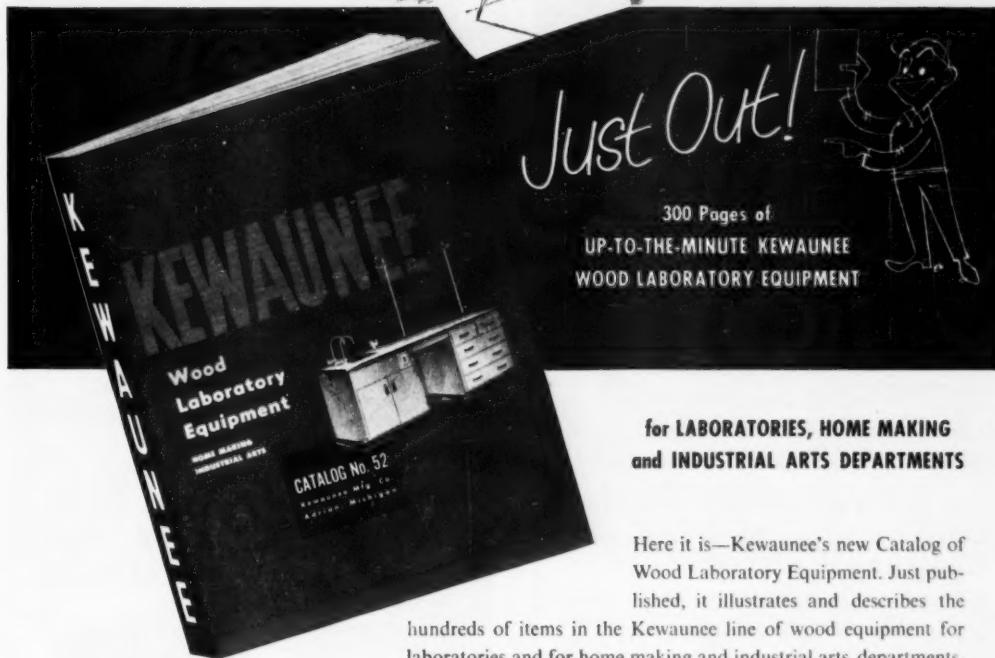


Grounds upkeep and maintenance problems are solved quickly, easily and BETTER when you use the powerful 5-HP Gravely Tractor! . . . 21 tools for year-round use with seasonally selected attachments, quick change from job to job in minutes! Only the Gravely does so many jobs so well!

All-Gear Drive, Power Reverse. School-tested for 32 years . . . Ask for your copy of FREE Gravely catalog, "Power vs. Drudgery." Find out how you can do MORE jobs faster and better. Write today!

Gravely Motor Plow & Cultivator Co.
BOX 276 DUNBAR, WEST VIRGINIA

a Helpful Book for any School Budget



for LABORATORIES, HOME MAKING
and INDUSTRIAL ARTS DEPARTMENTS

Here it is—Kewaunee's new Catalog of Wood Laboratory Equipment. Just published, it illustrates and describes the hundreds of items in the Kewaunee line of wood equipment for laboratories and for home making and industrial arts departments.

It's a big book—300 pages—packed with helpful information. Typical laboratory and classroom layouts, actual installation pictures, complete product illustrations and specifications, full details on Kewaunee's famous Unit Assembly Plan, and how you can take advantage of Kewaunee's free Planning and Engineering service.

Free! This big, new Kewaunee Catalog No. 52 is available to you without cost or obligation. Mail the coupon for your copy now. It may help you to save hundreds, even thousands, of dollars on your school equipment budget.



Visit Kewaunee Exhibit,
Booths I-10, I-12, I-14
Atlantic City Meeting of American
Assn. of School Administrators
Feb. 14-19

Kewaunee Mfg. Co.

Manufacturers of wood and metal laboratory equipment
REPRESENTATIVES IN PRINCIPAL CITIES

KEWAUNEE MFG. CO., 5031 S. Center St., Adrian, Mich.

Send free copy of your new Catalog No. 52, "Kewaunee Wood Laboratory Equipment."
 Please have your representative call.

Name _____

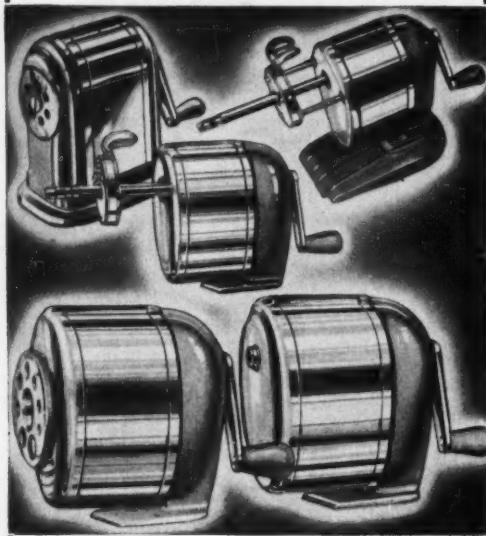
Title _____

School _____

Address _____

City _____ Zone _____ State _____

Specify BOSTON



... and get 6 EXTRA CUTTING EDGES on your pencil sharpener at NO EXTRA COST!

Headed up by the famous Boston KS the picture above shows a part of the BOSTON Pencil Sharpener line. Each BOSTON has 30 cutting edges instead of the 24 found on ordinary pencil sharpeners. Note the big husky all metal receptacles and stands. Built in lasting quality of steel and utility.



The BIG name in
Pencil Sharpeners

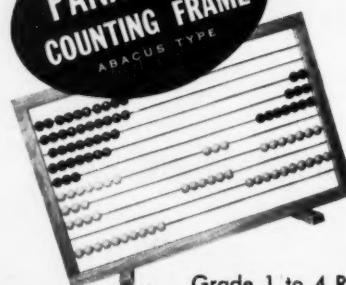
BOSTON
PENCIL SHARPENERS

Guaranteed
for 1 year.

C. HOWARD HUNT PEN COMPANY
CAMDEN 1, N. J. EST. 1899

For effective visual elementary
math teaching

**PANA-MATH
COUNTING FRAME**
ABACUS TYPE



SIZE 20" x 32"

Grade 1 to 4 Requirement

Pana-math is a versatile classroom counting frame for incidental learning of the important concepts of arithmetic. The ancient abacus is now adapted as a modern teaching aid to visualize numbers, groups and relationships by actual arrangement of beads. Sturdily constructed of 13/16" hardwood the frame has 10 removable push-spring rods each with 10 counting beads. Your teachers will appreciate Pana-math . . . highly recommended by teachers, principals and boards (Pat. Pend. . . . Reg. App. for)

• Time Teaching Clocks • Folding Easels • Stoves
Sinks • Refrigerators • Ironing Boards
Educational Toys • Jig-saw Puzzles • Peg Boards
Drawing Boards • Playhouse Screens • Beads

DEPARTMENT SE

DAINTEE TOYS, INC.

230 STEUBEN STREET, BROOKLYN 5, N. Y.

Send for "Manual
for Teaching with
Counting Frame"
by Dr. Irving Allen
Dodes.

Neumade

**ALL STEEL
FILM STRIP
CABINETS**

**PROTECTS
YOUR
FILM!**



MF-6

• Holds 336 1 1/2" Film Strip cans.
Each can held in separate compartment. Individual and master index. Holds film strips of varying lengths. Adjustable dividers in each drawer. Six removable drawers with back stops.

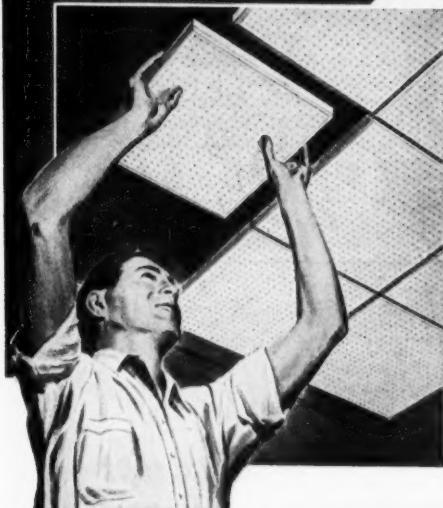
For Complete Film Equipment:
Film Cabinets • Projection Tables
Rewinds • Splicers
Editing Aids • Reels - Cans

Send for FREE illustrated Catalog

Neumade

Products Corporation
330 W. 42nd Street
New York 18, N. Y.

What we need is
LESS NOISE!



What you need is a
FIBRETON*
Acoustical Ceiling!



Johns-Manville Fibreton Acoustical Ceilings reduce disturbing noise...readily installed, they provide the quiet comfort so necessary for better, more efficient work.

Because distracting noise can lead to confusion and careless mistakes in schoolwork, practically all new schools include acoustical ceilings for noise absorption. However, even if your school was constructed before sound control became an established science, you can have Johns-Manville Fibreton Acoustical Panels easily and quickly installed over your present ceilings with little interruption to regular routine.

Johns-Manville FIBRETON offers an acoustical ceiling which is highly efficient and modest in cost. It consists of 12" square panels of sound-absorbing materials in which hundreds of small holes have been drilled. These holes act

as "noise-traps" where sound energy is dissipated. Fibreton is predecorated, can be painted and repainted, and is available with a flame-resistant finish.

Other Johns-Manville Acoustical Ceilings include *Permaacoustic**, a textured, noncombustible tile with great architectural appeal; *Transite**, panels made of fireproof asbestos; and *Sanacoustic**, perforated metal panels backed with a noncombustible, sound-absorbing element.

For a complete survey by a J-M acoustical expert, or for a free book entitled "Sound Control," write Johns-Manville, Box 158, Dept. SE, New York 16, N. Y. In Canada, write 199 Bay Street, Toronto 1, Ontario.

*Reg. U. S. Pat. Off.



Movable Walls—Terraflex* and Asphalt Tile Floors—Corrugated Transite*—Flexstone* Built-Up Roofs—Etc.

Johns-Manville



* In their formative years, physically as well as mentally, our youth is confined to the classroom for a large part of the day. Here is an opportunity, of which the teaching profession is fully aware, to encourage the proper physical habits as well as mental.

Norcor Tubular Desks and Chairs are designed according to scientific findings to promote proper school posture as well as comfort.

Physically erect, mentally alert and responsive, the pupil using a Norcor Desk and Chair is a better pupil.

Ask your Norcor distributor, or write for full information.

VISIT OUR BOOTH L-2 of the N.E.A. CONVENTION

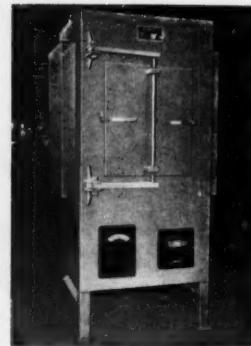
THE NORCOR MANUFACTURING COMPANY

Dept. E

Green Bay, Wisconsin



T U B U L A R D E S K S A N D C H A I R S



**Heavy Duty
Dependable Units
for schools
preferring
permanent
equipment**

**PERECO
Electric Kilns**

This is not flimsy hobby equipment. It is full-fledged school equipment built to the same heavy-duty quality standards of kilns used by industry. This Model MC-7800-SP connects directly across-the-line for intermittent service in school shops. Safe and simple to operate, it provides clean electric heat up to 2200° to 2300° F., with accurate control of firing cycles. Supplied with manual controls, including a 100-step power-input controller and magnetic contactor. Working chamber is 24" long, 18" wide, and 18" high. Many other models of Pereco Kilns also available. Write



PERENY

EQUIPMENT COMPANY

Dept. J, 893 Chambers Rd., Columbus 12, Ohio

CONSULT

Pittsburgh

FOR VERSATILE STAGING



CURTAINS
DRAPERY
FLATS
DROPS
TRACK
HARDWARE
STAGING
LIGHTING

Convert your large stage, in a matter of minutes—to a small unit for one-act plays, by means of our Curved Cyclorama Track. With the same lightning-like ease it can be cleared for a gymnasium! Consult Pittsburgh and cut costs. Write now!

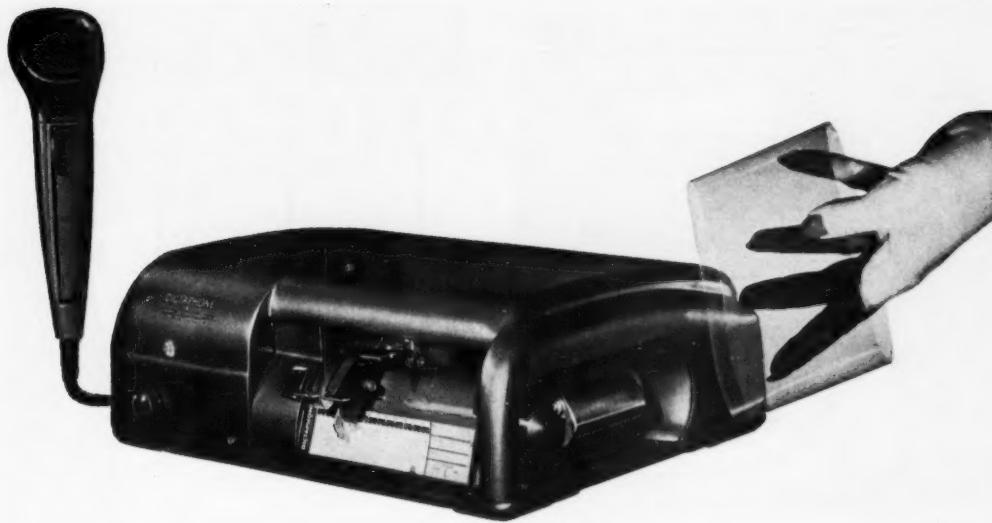
Pittsburgh Stage Inc.

2705 No. Charles St.

Pittsburgh 14, Pa.

THE SCHOOL EXECUTIVE

184



DICTABELT...exclusive with Dictaphone's dictating miracle, the TIME-MASTER !

"Clear as F-M radio," say executives and secretaries who have heard the reproduction of the pure, new *Dictabelt*.

Gone is the day of that costly secretarial complaint, "What did he SAY?"

Every word you think out loud, or low, is captured with such true-voice clarity that transcription—the real pay-off in dictation—is simpler, faster, letter-perfect. Clearly, the new *Dictabelt* opens up a new era in electronic recording on plastic.

With this exclusive, SUPERIOR medium, you always have a fresh, pure recording surface. Nor-

mally, *Dictabelt* is transcribed and thrown away, but this unbreakable voice record is easily mailed or filed.

Remember:

Dictabelt's many exclusive advantages are available only with the Dictaphone TIME-MASTER, the dictating machine that's making business history.

The tremendous acceptance of this new and different dictating machine has created an unprecedented demand for TIME-MASTER-trained secretaries. Point your graduates toward such a career by adding a course in TIME-MASTER transcription to your curriculum.

SEND COUPON NOW!

DICTAPHONE®

GREATEST NAME IN DICTATION



IT'S
SAID—



AND
DONE!

Dictaphone Corporation, Dept. SE-23
420 Lexington Ave., New York 17, N. Y.

I would like more information about the Dictaphone SCHOOL-RENTAL-AT-COST PLAN and the Business Practice Course.

Name _____

School _____

Address _____

City & Zone _____ State _____

Thousands of Schools
use AMERICAN STANDARD man-sized wet-mops, sweep mops and applicators exclusively. Ordinary household types are too fragile in construction, too slow in use, too costly in labor.

SE-178



For years the VICTORY Wet Mop has been our biggest seller. Thousands of maintenance men use VICTORY wet mops exclusively! Heavy-duty, quality yarn . . . Your best bet, if you want a mop of extraordinary durability, performance and economy.

"BIG X" SWEEP MOP

This sweep mop is our leader. Snatches up dust on contact. It's nationally famous. A durable giant—available in widths up to 5 feet! Can be removed from the block for washing. Once you try BIG X, you'll use no other.



HOLZ-EM APPLICATOR

You'll enjoy the fast, thorough performance of this luxurious, high-speed applicator. Perfect for use of applying wax, seals, varnish, etc. More professional floor finishers use HOLZ-EM than any other applicator.



Order

AMERICAN STANDARD products from your regular supplier. He has them—or can get them for you. If not, write direct.

TOPS IN MOPS!
AMERICAN STANDARD MFG. COMPANY

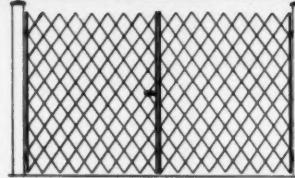
Incorporated 1908

CHARLES E. KREBS and WALTER O. KREBS
2507 S. GREEN STREET • CHICAGO 8, ILL.



ORNAMENTAL IRON WORK
for Schools and Colleges

SE-179



No. 600—Lattice Type Folding Gates

Many new & original designs for

**SCHOOL
BUILDINGS**

No. 2
Iron Fence



For Durability and Protection

Attractive designs for the Interior and Exterior requirements.

Measurements pertaining to your requirements would be appreciated when illustrations are requested.

We also manufacture: Iron Railing for platforms and steps, Pipe Railing, Area Gratings, Wire and Iron Window Guards.

Quotations given prompt attention.

Write for latest folder illustrating Ornamental Iron Work to suit your needs.

→ 2120 Florence Avenue

CINCINNATI IRON FENCE CO. INC.
CINCINNATI, OHIO.

SE-180

Ionia "SAFE-TEE"
FOLDING CHAIRS



CAN'T TIP, COLLAPSE, UPSET or SLIDE
Rounded Seat Corners! Metal Rubber-Covered Leg Caps!

Here's a safety all steel, indestructible folding chair that adds lounge chair comfort to sturdy dependability. Welded tubular frame . . . special safety construction . . . baked enamel finish . . . choice of colors. Cushion rubber feet . . . noiseless action. A nationally recognized value!

IONIA MFG. CO. • IONIA, MICH.

You'd give DITTO® an **A** on this!

Examination

- 1. DEPENDABLE!** It's been serving education for four decades. 4 million pupils in 35 thousand schools are taught with the aid of DITTO duplicators. Many DITTO school duplicators are older than the pupils they help teach.
- 2. VERSATILE!** It makes copies of just about anything a school wants duplicated—from lesson materials and forms to school newspapers and posters...in one to five colors at once...on any card or paper...in sizes from 3" x 5" to 9" x 14".
- 3. SIMPLE, RUGGED!** Tens of thousands of DITTO duplicators have been in operation for years. The DITTO duplicator needs no stencil, type, inking or make-ready. Just draw, type, write or print an original in reproducing ink or through reproducing carbon—clip that original to the DITTO machine—and roll out copies!

the newest
DITTO® D-10
(liquid) duplicators for schools

Requires no stencil, mat, inking or make-ready. Your "master" is anything written, typed, drawn or printed in reproducing ink or through reproducing carbon. Makes as many as 300 to 500 bright copies at 120 per minute. Reproduces copies in 1 to 5 colors at once. Use any card or paper, from 3" x 5" to 9" x 14". Ask for FREE Demonstration in your school. **DITTO, Inc., 2208 W. Harrison Street, Chicago 12, Illinois.**



DITTO®
(LIQUID) DUPLICATOR



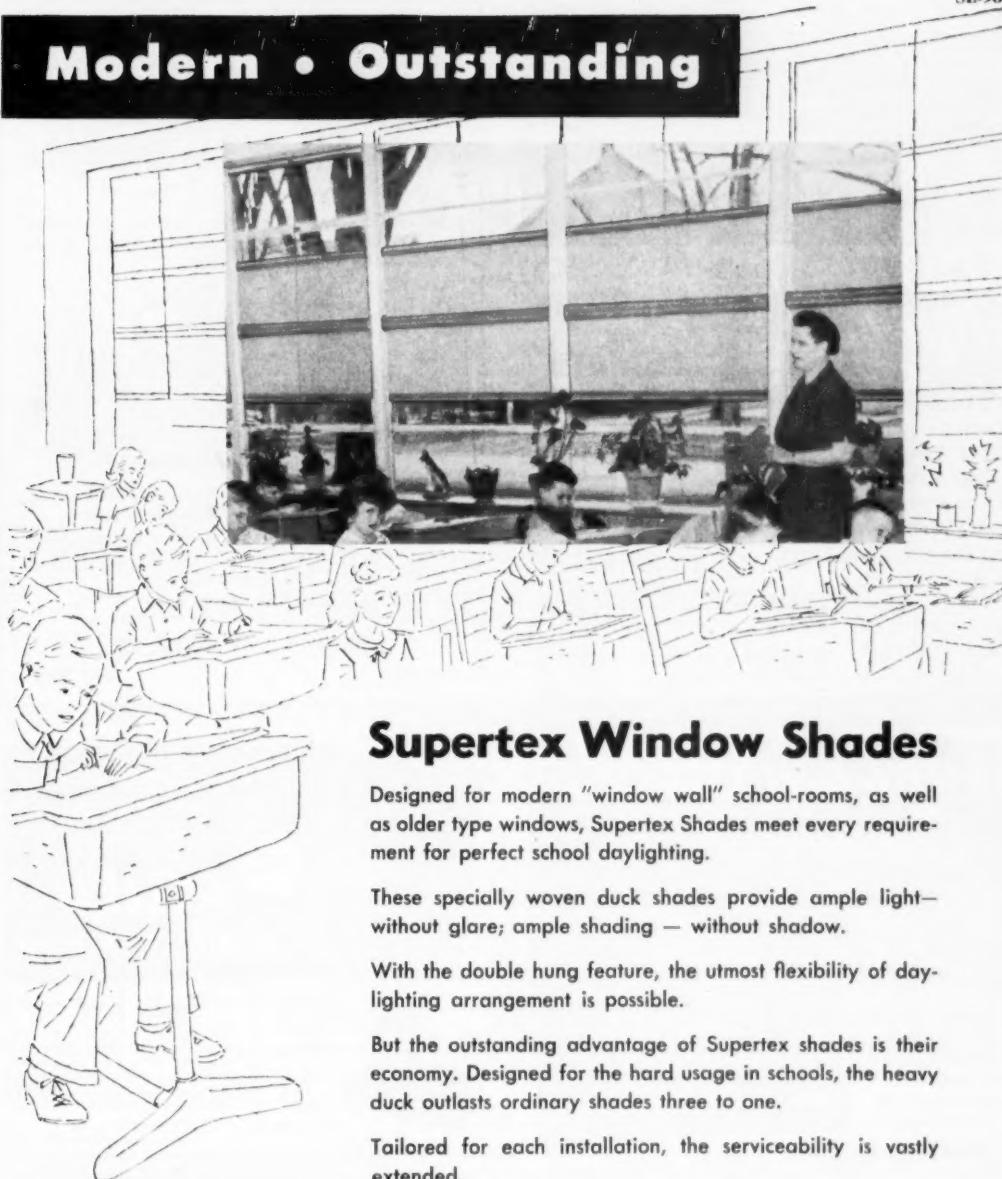
Are Your Teachers Getting the Benefits of DITTO LESSON MATERIALS?

• Teaching is aided, hours of class time are saved, with DITTO Workbooks. 65 new titles, each by a teaching authority. Every page

produces 100 gelatin or 200 liquid copies. Write for FREE Dito Workbook catalog, and sample lesson, ready to use.



Modern • Outstanding



Supertex Window Shades

Designed for modern "window wall" school-rooms, as well as older type windows, Supertex Shades meet every requirement for perfect school daylighting.

These specially woven duck shades provide ample light—without glare; ample shading — without shadow.

With the double hung feature, the utmost flexibility of daylighting arrangement is possible.

But the outstanding advantage of Supertex shades is their economy. Designed for the hard usage in schools, the heavy duck outlasts ordinary shades three to one.

Tailored for each installation, the serviceability is vastly extended.

If you need shades for your school, it will pay you to get figures from your school supply house (Ask for Supertex) or write us your specifications.

Darkening Shades

Dead black lightproof Supertex converts any room to a projection room. Standard or special light proof mounting. Write for full details.

**BECKLEY
CARDY**
SINCE 1907

BECKLEY-CARDY COMPANY

1632 INDIANA AVE.

CHICAGO 16, ILL.



**UNEQUALED in APPEARANCE,
DURABILITY
and
STRENGTH**

Mitchell
FOLD-O-LEG
tables

Convert any room
into a Banquet or
Group Activity Room...
Set up or clear in minutes
QUICKLY FOLD or UNFOLD
for Changing Room Uses



MAXIMUM
SEATING
MINIMUM
STORAGE



THE STRONGEST, HANDIEST FOLDING TABLE MADE!

**EASY TO SET-UP
ON or OFF STAGE**

Mitchell
PORTABLE
FOLDING STANDS

**RIGID, SAFE
for BAND
ORCHESTRA
CHORAL &
DRAMATIC
GROUPS**



**IMPROVE APPEARANCE
AND PERFORMANCE**

Better Acoustics and Discipline. Easier control of group by Director. Available in 1, 2, 3 or 4 elevations. Easy to handle units with strong 4' x 8' Fir plywood tops and rigid tubular steel legs. Band stand shown stores in space only 4' x 8' x 6' high.

**LEGS FOLD UNDER FOR
MINIMUM STORAGE**

STACK IN SMALL SPACE

SAVE TIME & LABOR

Write for Descriptive Folders

MITCHELL MFG. COMPANY

2726 S. 34th Street

MILWAUKEE 46, WIS.

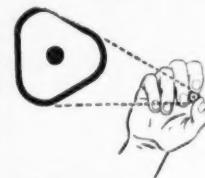
MANUFACTURERS OF
MITCHELL FOLDING TABLES, BAND AND CHORAL STANDS

TRYREX

**... "the shape"
made to order
for Students**

Our School Series Pencils are specially constructed for easy writing. They're shaped to fit fingers to perfection—never roll.

TRYREX . . . the revolutionary orthodigital shape, designed to fit the normal writing position of the fingers . . . won't roll . . . won't turn in the hand.



Other important features:

- All leads bonded to the wood to prevent pencil breakage.
- Leads fine ground, compact—wear considerably longer than ordinary school pencils.
- Stamped with a harmless non-metallic white pigment.
- Pointed at the factory, ready to use the instant the box is opened.

SEND FOR SAMPLE KIT

RICHARD BEST PENCIL CO.

Springfield

New Jersey

**Everything in Electronics
FOR THE SCHOOL!**

FREE! 236-PAGE 1953
ALLIED
RADIO-TV CATALOG



**FAMOUS
RADIO
LAB KIT**
•
**10
KITS
IN ONE!**

Amazingly instructive: builds receiver, amplifier, oscillator, signal tracer, timer, photo cell relay, etc. With all parts, tubes, mike, instructions. \$3-265. Only . . . \$14.25

"Ranger" AC-DC Radio Kit. A popular school project kit. Complete with cabinet. \$3-275. Only \$17.85
Dozens of other kits available.



**Automatic Control
TAPE RECORDER**
Most exceptional recorder value on the market. Fully described in Allied's Catalog. \$6-485. Only . . . \$104.50

SEND FOR IT!

ALLIED is the one complete, dependable school supply source for all radio and electronic needs. Our 236-page 1953 Buying Guide features the world's largest selections of:

- Radio Training Kits
- Laboratory Instruments
- Custom TV Chassis
- FM, AM Tuners & Radios
- Electronic Tubes & Parts
- Recorders & Accessories
- Sound Equipment
- Tools and Books

Depend on ALLIED for time-saving, money-saving, expert electronic supply service. Write today for our FREE 1953 Catalog —your guide to everything in Electronic equipment.

ALLIED RADIO

833 W. Jackson Blvd., Dept. 8-8-3
Chicago 7, Illinois

Specialists in Electronic Supply for Schools

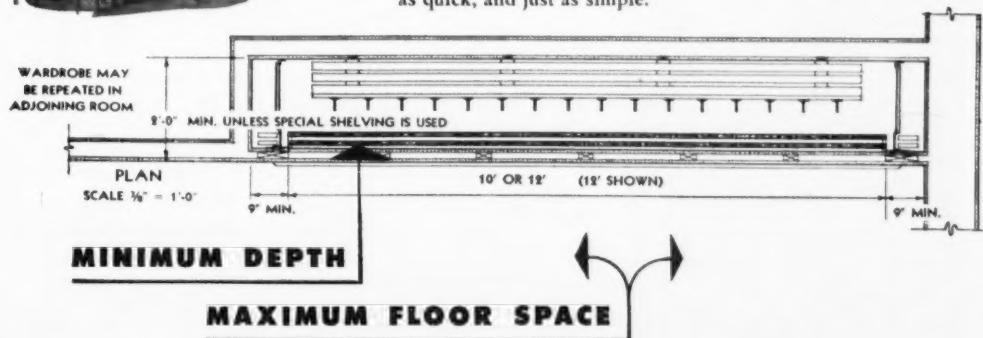


WARDROBEdoor

FOR SCHOOLS

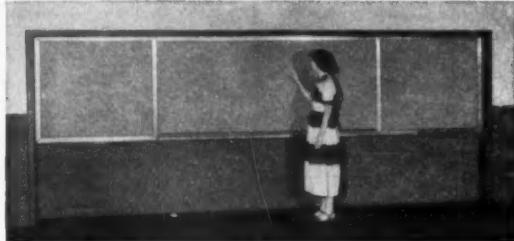
GOES UP
SAVES SPACE

When you want to open the wardrobe, you simply *lift* the door — it goes straight up and out of the way. It is counterbalanced, so it lifts easily, almost "fingertip" control. The two sections are synchronized, the lower section automatically moving twice as fast. Lowering the door is just as quick, and just as simple.



IN THESE TWO WAYS
THERE IS THE
LEAST SPACE WASTED

Planners of school buildings always like to reduce wasteful floor area. The Barcol WARDROBEdoor is a great help in this respect for two reasons: (1) wardrobes can be minimum depth and length because the all-vertical door does not require any space inside the closet; (2) all the floor space immediately in front of the door is available at all times, because the all-vertical door does not protrude into the room in any way. Consequently, only the minimum of floor space, as indicated on the plan above, need be allowed for this type of wardrobe door.



CHALK BOARD OR CORK BOARD PANELS

The Barcol WARDROBEdoor has large unbroken free areas which are ideally suited for facing with chalk board or cork board, or any combination, in any desired sizes. In this way the door serves double duty. There is no rubbing on these surfaces when the door is raised.

SEE US IN BOOTH 1220, AASA CONVENTION, ATLANTIC CITY

BARBER-COLMAN COMPANY
156 MILL STREET, ROCKFORD, ILLINOIS

Write for
Bulletin F-4644
giving full
description and
data.





At your age!

If you are over 21 (or under 101) it's none too soon for you to follow the example of our hero, Ed Parmalee, and face the life-saving facts about cancer as presented in our new film "Man Alive!". You'll learn, too, that cancer is not unlike serious engine trouble—it usually gives you a warning:

(1) any sore that does not heal (2) a lump or thickening, in the breast or elsewhere (3) unusual bleeding or discharge (4) any change in a wart or mole (5) persistent indigestion or difficulty in swallowing (6) persistent hoarseness or cough (7) any change in normal bowel habits. While these may not *always* mean cancer, any one of them should mean a visit to your doctor.

Most cancers are curable but *only* if treated in time!

You and Ed will also learn that until science finds a cure for *all* cancers your best "insurance" is a thorough health examination every year, no matter how well you may feel—twice a year if you are a man over 45 or a woman over 35.

For information on where you can see this film, call us or write to "Cancer" in care of your local Post Office.

American Cancer Society



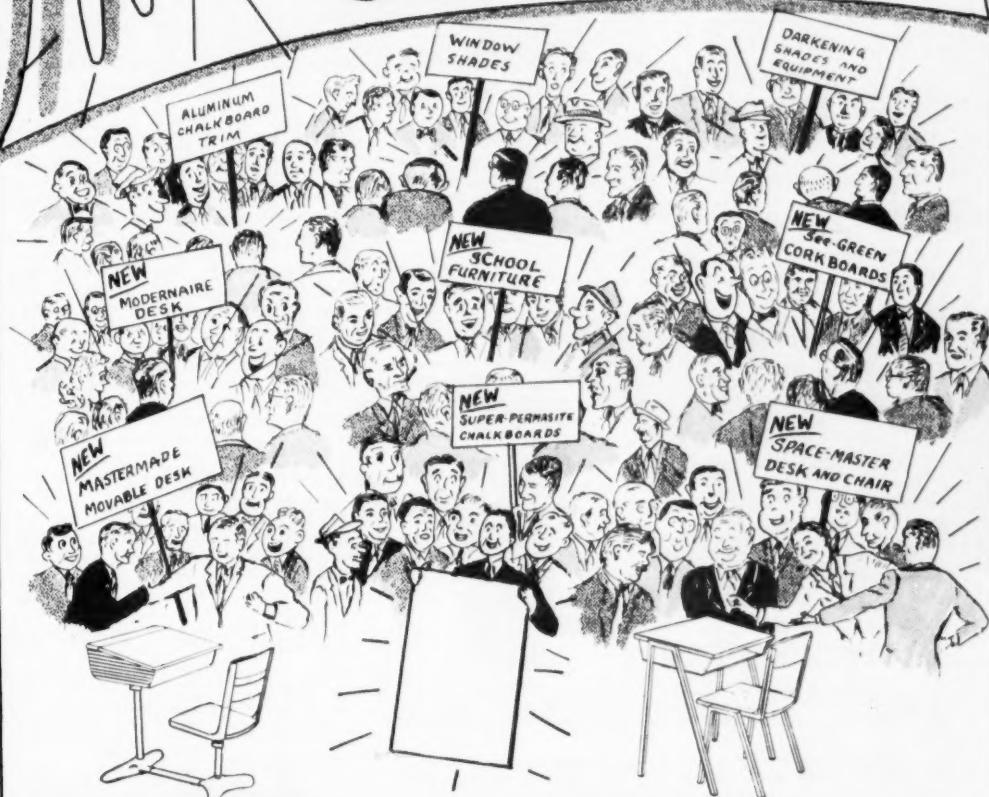
MAN ALIVE! is the story of Ed Parmalee, whose fear weakens his judgment. He uses denial, sarcasm and anger in a delightful fashion to avoid having his car properly serviced and to avoid going to a doctor to have a symptom checked that may mean cancer. He finally learns what a difference it makes (in his peace of mind and in his disposition) to know how he can best guard himself and his family against death from cancer.

AASA-NEA CONVENTIONEERS!

YOU ARE INVITED TO SEE THE



New ROWLES School Equipment



ROWLES
School Equipment

You can see them all at
BOOTH B1 & B3

E. W. A. ROWLES COMPANY
ARLINGTON HEIGHTS, ILLINOIS



INDEX TO ADVERTISERS

Acorn Wire & Iron Works	8	Ditto, Inc.	187	Leavitt Bleacher Co.	110
Aladdin & Westlake	97	Dinner Shade Co., Luther O.	112	Legge Co., Walter G.	106
Alato Equipment Co.	97	Dudley Lock Corp.	111	Lowrance Sales Dept., American Mfg.	115
Allied Radio Corp.	190	Duke Mfg. Co.	107	& Foundry Co.	115
Aluminum Cooking Utensil Co.	18	Duracote Corp.	39	Loxit Systems, Inc.	29, 103
Americana Corp.	32, 33				
American Bitumuls & Asphalt Co.	124	Eagle Signal Corp.	99	*Manley, Inc.	137
American City Bureau	28	Eberhard Faber Pencil Co.	164	Master Lock Co.	156
American Cyanamid Co.	119	Electric-Aire Corp.	92	Mastic Tile Corp. of America	133
American Deck Mfg. Co.	161	Edsel Paint Co.	101	Metcal Products, Inc., Fred	170
American Playground Device Co.	139	Engineering Mfg. Co.	174	Merriam, G. C.	172
American Products Co., The	97	Executive, Inc.	91	Michaels Art Bronze Co.	140
American Seating Co.	179, 188			Mitchell Mfg. Co.	190
American Standard Mfg. Co.	25	Fibersin Plastics Co.	89, 151	Monroe Co., The	176
Audio Devices, Inc.	156	Finell System, Inc.	122	Moore Co., E. R.	135
Automatic Devices Co.	176	Flour City Brush Co.	97	Moore Co., P. O.	109
Automatic Pencil Sharpener Co.	154	Formica Co., The	35	Multi-Clean Products, Inc.	195
Baker-Roos, Inc.	95	Fuller Brush Co.	90		
Barber-Colman Co.	191	Geepres Wringer, Inc.	109	Naden and Sons	152
Basicick Co.	162	General Electric Co., Photolamps Div.	147	National Box & Can Co.	111
Beckley-Cardy Co.	189	General Motors Corp., Chevrolet Div.	24	National Chemical & Mfg. Co.	150
Bell Champion Co.	16	Gulde Mfg. Co.	118	National Cornice Works	188
Best Pencil Co., Inc., Richard	199	Gouger Keyless Lock Co., C. L.	160	National Dryer Sales Corp.	118
Blodgett Co., The G. S.	130	Gravely Motor Plow & Cultivator Co.	180	National Lock Co.	178
Bonton Molding Co.	112	Grieggs Equipment Co.	34	National School Furniture Co., Div. of	173
Bradley Washfountain Co.	116	Grocery Store Products Co.	172	National Store Fixture Co.	173
Breuer Electric Mfg. Co.	153	Haldeman-Langford	142	Nelson Ind., Herman, of American Air	148
Brewer-Titchener Corp.	178	Hanover Sales Co.	156	Filter Co., Inc.	16, 17
Brillo Mfg. Co.	158	Harrab Mfg. Co., Kant-Slan Div.	170	Nesbitt, Inc., John J.	196
Brotherhood Mutual Life Ins. Co.	89	Heim Co., H. J.	117	Nestle Co., Inc., The	109
Brunswick-Balke-Collender Co.	12-13, 177	Holden-Patterson Book Cover Co.	99	Neubauer Mfg. Co.	172
Brush Electronics Co.	14	Horn Co., Inc., A. C.	166	Neumad Products Corp.	182
Bunke Co., J. E.	120	Horn Bros. Co.	12-13, 177	Norcom Audio Products Co.	135
Celotex Corp.	143	Hotel Plymouth	185	Norcom Mfg. Co.	184
Churchill Mfg. Co.	157	Hunt Pen Co., C. Howard	182	Old Town Corp.	100
Cincinnati Iron Fence Co., Inc.	186	Huntington Laboratories, Inc.	128	Oneida Products Corp.	125
Claridge Equipment Co.	42, 104	Hussey Mfg. Co., Inc.	164	Ox Fibre Brush Co., Inc.	166
Clebar Watch Agency	162				
Consonata, Div. of C. G. Conn	164	*International Business Machines Corp.	87	Peninsular Mfg. Co.	152
Cram Co., The Geo. F.	168	*International Molding Plastics, Inc.	158	Penn State Prod. Guild, Inc.	102
Crouse-Hinds Co.	23	Irwin Seating Co.	141	Perry Equipment Co.	184
Curtis Lighting, Inc.	159	Johns-Manville	183	Peterson & Co., Inc., Leonard	102
Daintee Toys, Inc.	182	Johnson Plastic Tops	31	Pittsburgh Corning Corp.	40, 41
Da-Lite Screen Co., Inc.	88	Johnson & Son, Inc., S. C.		Pittsburgh Plate Glass Co.	2
Dant and Russell, Inc.	174	Kent Mfg. Co.	104	Pittsburgh Stage, Inc.	184
Davenport & Sons, Inc., A. C.	174	Keweenaw Mfg. Co.	181	Playtime Equipment Corp.	98
Dick Co., A. B.	96	Keyes Fibre Sales Co.	95	Powers Regulator Co.	26, 27
Diaphragme Corp.	185	Klenzade Products, Inc.	166	*Pressed Steel Car Co., Solar-Sturges	132
				*Presto Recording Corp.	127

SE-194

Light Dimming Equipment

JUST RIGHT
FOR EVERY NEED
in the Complete
POWERSTAT
Line

For Example:
Non-Interlocking Dimmers

When only a few circuits require dimming, Non-Interlocking POWERSTAT Dimmers are just right for YOUR needs. Widely used in assembly halls, chapels, lodges and other single-room installations, they dim, blend and brighten light smoothly and efficiently.

Non-Interlocking Dimmers consist of one or more units operating in unison on a single shaft; separate control of individual units is not possible. Manually-operated models — and motor-driven models for remote control from any convenient location — are available in ratings from 1,000 to 30,000 watts. For complete information, send for your free copy of Bulletin D851N.

AND FOR EVERY TYPE OF INSTALLATION . . . however simple or complex, there is a POWERSTAT Dimmer just right to do the job better. We will be glad to help you make the best possible selection to meet your requirements.

WRITE TO: 3023 DEMERS AVE., BRISTOL, CONNECTICUT

THE SUPERIOR ELECTRIC CO.
BRISTOL, CONNECTICUT



U. S. Plywood Corp.	108
United World Films, Inc.	160
United Watch & Clock Co.	38
Universal Dishwashing Machinery Co.	138
Universal Industries	135, 136
Up-Right Scaffold Co.	171
Vacuum Can Co.	115
Vallen, Inc.	168
Victor Animatograph Corp.	149
Viewlex, Inc.	167
Virco Mfg. Co.	168, 180
Warren Webster & Co.	36, 37
Wasco Flashing Co.	15
Wayne Iron Works	160
Wayne Works	171
West Disinfecting Co.	163
Westerly Waterproof Co., Inc.	101
Wiltord Corp.	101
Wyandotte Chemicals Corp.	93

**Catalogs or condensed catalog data of these firms are filed in THE AMERICAN SCHOOL AND UNIVERSITY 1952-53 Edition.*

"THOUSANDS OF FOOTSTEPS DAILY, YET THE MULTI-CLEAN METHOD HAS MADE THIS FLOOR ONE OF THE EASIEST TO KEEP CLEAN AND ATTRACTIVE"...

SE-2



*Director of Maintenance**

SCUFF MARKS ARE
SELF-HEALING ON THIS
HEAVILY TRAVELED
ASPHALT TILE HALLWAY

HERE'S HOW THE MULTI-CLEAN METHOD WORKS ON THIS ASPHALT TILE FLOOR

(1) Every four months Multi-Clean Asphalt Tile Preserver is applied to this floor using a 12-oz. mop and wringer bucket. The mop is pulled through the wringer two or three times leaving only enough Preserver in the mop for a thin and even application. In ten minutes the floor is ready for traffic. (2) If more of a lustre is desired Multi-Clean Anti-Slip Waterproof Floor Wax may be applied and the floor buffed with the Multi-Clean Floor Machine. (3) Daily maintenance consists of a dust mopping followed by a wet mopping with plain water. Dust mops are treated with Multi-Clean Dry Sheen Furniture Polish cut 50% with water each time before using.

Multi-Clean Asphalt Tile Preserver is anti-slip and self-healing; scuff marks disappear like magic. The porosity of the floor is also reduced, and minute scratches which detract from the floor's appearance and make maintenance difficult are made smooth by this treatment.

THERE'S A MULTI-CLEAN METHOD FOR *Every* TYPE OF FLOOR

The Multi-Clean Method is a carefully planned, thoroughly tested and proved procedure developed by floor specialists. It combines the use of the right chemicals and equipment with the proper application for all types of flooring and floor conditions.



FREE REFERENCE FILE ON FLOOR MAINTENANCE

A set of handy reference manuals, each one describing the care and maintenance of a particular type of floor, have been prepared by Multi-Clean. They contain detailed information on the care of new floors, advantages of certain types of floors and proper procedures for refinishing and maintaining old floors. Write for your set of floor reference manuals today.

*Name on request.

MULTI-CLEAN
PRODUCTS, INC. ®

2277 FORD PARKWAY

ST. PAUL 1, MINNESOTA

MAIL
Today!

Multi-Clean Products, Inc.
2277 Ford Parkway, Dept. SE-2
St. Paul 1, Minn.

Send me more information about The Multi-Clean Method
and a set of handy floor maintenance manuals.

Name _____

Title _____

Address _____

City _____ Zone _____ State _____



Multi-Clean Asphalt Tile Preserver assures
you a beautiful, longer wearing floor at
an amazingly low cost.

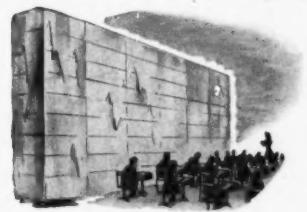


Multi-Clean's high performance vacuum is
equally efficient on wet or dry pick-up,
ends all your cleaning worries.

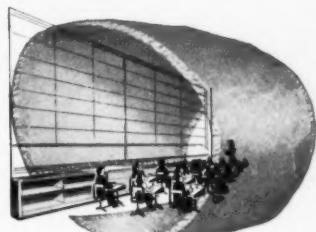


The all-purpose floor machine with its easy
on-off attachments is essential to the Multi-
Clean Method on all floors.

For Positive Protection Against Window Downdraft You Need The Nesbitt Syncretizer—The Only Unit Ventilator That Provides A Continuous Blanket of Warm Air Between Those Cold Surfaces And The Classroom Occupants. Specify The Unit Ventilator That Sets A New Standard of Classroom Comfort



In very cold weather large window areas become a "wall-of-ice" in the classroom.



The Nesbitt "thermal blanket" protects pupils from the cold window downdraft.

See The Nesbitt System for Thermal Comfort in the Classroom at the A. A. S. A. Convention, February 14-19, Booths G—45-7-9.

MADE AND SOLD BY JOHN J. NESBITT, INC., PHILADELPHIA 36, PA. • SOLD ALSO BY AMERICAN BLOWER CORP.

